# California
## JOURNAL OF
# EDUCATIONAL RESEARCH

Vol. IV, No. 5 November, 1953

## IN THIS ISSUE


- Feature: Research in Perspective
- A Study of Emotionally Disturbed Children
- Needed Research on School Plants
- Reading Ability and Literary Appreciation
- Girls Prestige Groups
- Digests of Theses and Dissertations
  Modern Schools and the "Fundamentals"
  Financial Support of County Services
- Editorial: Blow, Gabriel, Blow!
- Book Reviews
- Research News and Views
- Index to Volume IV


PUBLISHED BY
**CALIFORNIA TEACHERS ASSOCIATION**
693 SUTTER STREET • SAN FRANCISCO 2

# CALIFORNIA JOURNAL OF EDUCATIONAL RESEARCH

**Published by the California Teachers Association**



**ARTHUR F. COREY**
State Executive Secretary
693 Sutter Street, San Francisco, California

**EDITOR**
FRANK W. PARR
Director of Research
California Teachers Association

**ASSOCIATE EDITOR**
KENNETH R. BROWN
Assistant Director of Research
California Teachers Association



**EDITORIAL BOARD**

HUGH M. BELL
Dean, Student Personnel and Guidance
Chico State College

LILLIE L. BOWMAN
Director, Bureau of Research
San Francisco Unified School District

HAROLD D. CARTER
Professor of Education
University of California

ROBERT E. CRALLE
Executive Secretary
California Association of School Administrators
Pasadena, California

MERLE H. ELLIOTT
Director of Research
Oakland City Schools

HENRY I. WEITZEL
Research Coordinator
Pasadena City Schools

LUCIEN B. KINNEY
Professor of Education
Stanford University

D. WELTY LEFEVER
Professor of Education
University of Southern California

ALFRED S. LEWERENZ
Director, Evaluation and Research
Los Angeles City Schools

HENRY W. MAGNUSON
Chief, Bureau of Education Research
State Department of Education

DAVID G. RYANS
Professor of Education
University of California at Los Angeles

HARRY W. SMALLENBURG
Director, Division of Research and Guidance
Los Angeles County Schools



The *California Journal of Educational Research* is published at San Francisco five times a year: January, March, May, September, and November. Subscription price: $6.00 per year; single copies, $1.50. Student subscription rate: $3.00 per year. Editorial office address: CALIFORNIA JOURNAL OF EDUCATIONAL RESEARCH, 693 Sutter Street, San Francisco 2, California. (Checks should be made payable to the California Teachers Association.)

Entered as second class matter at the Post Office at San Francisco, California.

CALIFORNIA JOURNAL OF EDUCATIONAL RESEARCH

Volume IV November, 1953 Number 5

## CONTENTS

Blow, Gabriel, Blow! (An Editorial) . . . . . 194

Research in Perspective . . . . . 195
*Frank N. Freeman*

The Relationship Between Reading Aibility and Literary Appreciation . . . . . 201
*Delwyn G. Schubert*

Needed Research in the School Plant Field . . . . . 203
*T. C. Holy*

A Study of Emotionally Disturbed Children in Santa Barbara County Schools . . . . . 209
*Norah Clancy and Faith Smitter*

Do Modern Schools Provide Sufficient Time For the Teaching of "Fundamentals" . . . . . 219
*James P. Wilson*

Financial Support of the County Superintendents' Services . . . . 223
*H. Fred Heisner*

Girls Social Groups Rate Each Other . . . . . 227
*Evan R. Keislar*

BOOK REVIEWS . . . . . 233

RESEARCH NEWS AND VIEWS . . . . . 235

INDEX TO VOLUME IV . . . . . 237

# THE EDITORS SAY:

## Blow, Gabriel, Blow!

BY THE TIME you have read this piece the Fifth Annual Conference on Educational Research will be in session in Santa Barbara. In a sense this *Journal* is a kind of spokesman for the Conference, inasmuch as both the Conference and the Journal are creatures of the CTA Advisory Council on Educational Research. Many of the papers and presentations resulting from the Conference have been given wide circulation by the *Journal.* Having seen a preview of the conference program we are confident that the fifth annual meeting will remain as bright in the memories of the conferees as have the previous gatherings. We know that the four sections on education for gifted children, improvement of tests, evaluation of special education, and recent research methods will yield to the conference workers a modest harvest of valuable experience.

Which leads us to want to express our sincere appreciation and hearty thanks to those indefatigable workers who each year design the conference and complete the arrangements for the program and facilities—the subcommittees of the Advisory Council on Educational Research. The willingness and skill which they have shown for five straight years is the treasure of each individual educational researcher in California, and the outcomes of the conferences are inheritances for every school in the State.

These same people put on other coats and are both godmother and godfather to the *Journal.* They not only round up most of the material that we print herein, but sit as a court of judges, critics, and disciplinarians on the selection and use of the research reports which come to be the material of which the *Journal* is made. It is an unpaid task, though perhaps a rewarding one, and nothing short of unlimited praise is their due. Many thanks to you, each one, from the bottom of our type case!

We are sure that the *Journal* is a meritorious enterprise. As we look over the contents of the past four years, in addition to the outlet the publication affords for original and individual research reporting, certain features can not help but be significant contributions to the educational research of the State as a whole: digests of the papers read before the California Educational Research Association, the annual list of theses and dissertations, occasional news briefs on research progress in the schools. Then there has been the fine series of philosophical and analytical articles by the prominent national figures who have been called to California for various reasons, among them Truman Kelley, Walter Monroe, Frank Freeman, Edgar Morphet, Ivan Booker, Herbert Conrad, Guy Buswell. Truly the *Journal* has been the voice of educational research in California for the last few years.

*(Continued on Page 200)*

# Research in Perspective

FRANK N. FREEMAN

I SHALL consider research in perspective, not to engage in interesting reminiscence, but to see whether such consideration will throw any light on the way we go about research and whether we might profitably give more consideration to the planning of research. In other words our glance at the past will be to seek light on the future.

My memory covers almost the whole period of formal research in education. I have known personally such leaders as J. Mc K. Cattell, E. L. Thorndike, Charles H. Judd, W. F. Dearborn, John B. Watson, John Dewey, Charles Spearman, L. M. Terman, Leonard Ayres, G. D. Strayer, J. R. Angell, R. S. Woodworth, W. W. Charters, W. C. Bagley, T. L. Kelley, L. L. Thurstone, L. V. Koos, to mention only the old-timers who come to my mind, and have heard Wm. James, and G. Stanley Hall speak.

I have witnessed some of the crucial discussions and debates. I remember when Watson launched Behaviorism in his presidential address at the A.P.A. meeting in Chicago about 1913 or 1914 and the debate between Angell and Cattell at the same meeting on the question of cooperative *vs.* individual research. I also remember the hot debate at Boston between Bagley and Judd on one side and Terman on the other over the question of heredity *vs.* environment. Also the day in San Francisco when Judd and Kilpatrick, at probably the only time they were on the same side, attacked the *Yearbook on Learning* sponsored by McConnell.

## Motivations of Research

As I think over research, my own included, I conclude that it does not usually grow out of a critical review of the problems most in need of research, or a careful examination of the techniques available followed by a systematic attempt to develop and refine the necessary techniques. It is usually much more casual than this.

The history of the A.E.R.A. is instructive. Originally an association of directors of research it did little to promote research. These officers did little research because their chief business was giving tests and keeping records. They had neither the leisure nor resources for real research. This was carried on mostly by university professors, who were not for some time eligible for membership. These men, though interested somewhat

*Dean Frank N. Freeman who retired from the University of California School of Education in 1950 spans the first half century of educational research with his personal recollections. With his doctorate from Yale he has taught in Yale, Chicago, Harvard, and California where he became dean in 1939. His committee chairmanships are too numerous to list. The present paper contains his address before the California Educational Research Association at the College of the Pacific, March 21, 1953.*

remotely in practical problems, were largely motivated by interest in theoretical problems or by questions of technique. Their procedure was casual rather than systematic.

Take a few cases for illustration:

Thorndike studied for a time with James and came in contact with the experimental method. He performed a significant experiment on animal learning, and with Woodworth one on transfer of training. From the results of these experiments and the hunches he derived, he built an influential structure of theory—the so-called laws of readiness, exercise, and effect, and the concept of specificity of learning. But he did not immediately follow up these early studies with further experimental analysis. Through Cattell he fell in with the statistical tradition and interests which Cattell, in turn, inherited from Galton and Pearson. Most of Thorndike's later work was by this method, for instance his later study of transfer by the analysis of the correlation of test scores with the studies pursued in high school, and his studies of arithmetic. His study of twins is an example of a sporadic excursion by statistics into the biological field of heredity derived from Galton. His study of cities is another application of statistical analysis to a field, this time outside his main area of interest. One cannot escape the impression of casualness in this record.

Take Judd's work as another example. He was trained in the experimental method with Wundt. For some reason he had a strong prejudice against statistics, though he later used them in simplified form in his surveys. He never, however, used mathematical analysis. Not until I started to teach mental tests did I learn of the work of Spearman and Pearson.

With the experimental method Judd combined an interest in behavior —though he never was a Behaviorist. This interest came largely from James and Dewey, and fitted well into an interest in Education, which in turn apparently came from an appointment in psychology and pedagogy at N. Y. University and Cincinnati and a later directorship of the summer school at Yale. At any rate, it led him into an experimental theory of eye movements in perception and reading and of handwriting. I, in turn, inherited this interest from him.

Spearman's work again illustrates the development of research from a hunch and a technique. The hunch was *g* and the technique was factor analysis. They led to a wide ramification of investigations and ultimately to some practical applications.

## Examples in Subject Matter Fields

The example of reading is further instructive. Three experimental methods of studying reading were hit on independently: Huey's mechanical method derived from Delabarre, Dodge's falling plate photographic method, and Judd's motion picture method. Dearborn inherited Dodge's method, using a time line by interrupting the beam of light and two films

to locate fixations vertically and horizontally. Buswell refined this method and added the voice record, and then launched his elaborate and far-reaching series of experiments, extending them beyond reading to arithmetic and art, but exemplifying an exceptionally large scale and systematic development of a field and fields related through the use of a common technique.

G. M. and H. B. Wilson's study of arithmetic in everyday life, and similar studies by Thorndike, Horn and others, and Charters' job analysis studies opened up a whole world of investigations which have attempted to lay the foundation of the curriculum in social use instead of mental training.

Experiments by Binet opened up the field of measurement of individual differences, and those of Thorndike, Ayres and others the measurement of achievement. Statistics of grade placement by Thorndike, Ayres, Strayer and others revealed the great variations in progress through the grades and stimulated the study of the theory and practice of classification of pupils.

The Eight Year Study by a statistical analysis of college attainment of high school graduates attempted to evaluate broad differences in curriculum and methods, but it doubtful whether this is a satisfactory way to attack this problem. Koos made a somewhat similar attempt to evaluate forms of organization at high school—junior college level.

I have not included reference to surveys or to "action research" because I regard them as mainly normative procedures rather than research in the usual sense of the word. This, of course, does not mean that they are not useful.

These examples may perhaps serve as hints on which to base a natural history of research. They may serve to give some idea of how research has developed, though they do not necessarily indicate completely how research should develop. They suggest more the strengths than the weaknesses of the usual way of conducting research because they note its successes rather than its failures. They do not point out the blind alleys into which it has gone nor the futilities to which it has succumbed.

## Starting Points of Research

Research may often seem to be unduly haphazard and in need of more careful planning, and I think it is commonly both of these things, but there is danger in setting up a purely hypothetical or ideal procedure which we propose to substitute for the one that has actually been followed. This is like attempting Utopias which are based on an ideal rather than the real human nature.

The fact is that *research must start from where we are;* that is, from the techniques we possess and the comprehension of problems that we have. Both techniques and conceptions of problems develop as we proceed, but

such development comes from the labor of research and not from mere thinking alone.

When we review the history of research I think we will see that there is more than one starting point or mainspring. Some of the mainsprings of research are:

> Curiosity about the fundamental constitution and laws of some segment of the universe — *theory.*
> Curiosity about the best or at least a successful way to carry on some practical enterprise — *practical problems.*
> Curiosity to see what will come of the application of a known technique to a new field — *using a technique.*
> Curiosity about the *improvement of a technique* or the *creation of a new technique.*
> Curiosity about the outcome or manifest performance in contrast with curiosity about the process by which it is attained — *measurement.*

Research may start with a practical problem and work toward explanation and theory or start from theory and work toward practice, or it may start with technique.

All of these have, I think, led to profitable research, and its improvement does not depend on choosing one to the exclusion of the others. Neither does it depend on the choice of one method rather than others. Some methods may be less basic than others or less appropriate to particular problems, but this calls for judgment in using them and in interpreting the results rather than for giving them up.

We may make a rough and very broad distinction between *practical* and *fundamental* research. Practical may extend from the collection of statistics on the local situation, such as a.d.a. or population analysis, to the comparison of modes of organization or methods of procedure. Fundamental may refer to studies in the theory and philosophy of education or to studies in the disciplines basic to education, such as philosophy, psychology, sociology, economics, political science and law. Studies throughout the whole gamut are pertinent. Surveys are also important.

## Requirements of Good Research

Without, then, confining research to studies of a certain type and excluding others, we may make a few observations, admittedly based on judgment and opinion, on ways of improving research.

*Planning.* Research does not typically follow anything like a complete blueprint. It is to a great extent a step by step procedure. Frequently unexpected by-products are more valuable than the expected outcome, as in the Ebbinghaus completion test.

However, it should have some aim. This may be mainly practical or mainly theoretical, or both. But possible consequences or implications should be carefully thought out. Analysis of the outcome of previous studies is good preparation. Procedure should never be random.

In planning it is well to envisage possible and probable outcomes and to evaluate these outcomes provisionally in reference to either practical or theoretical values.

To be avoided is an elaborate application of techniques—experimental or statistical—in the hope that a set of facts may be discovered and that these facts will then, in some unpredicated fashion, automatically manifest their value. This is not research because there is no search involved except perhaps the search for a degree, for promotion or prestige. It does not include Dewey's first step in problem solving, the recognition of a problem or difficulty. Its results clutter up our journals and libraries to our everlasting discredit. We should brand it for what it is—a worthless counterfeit of research.

*Among practical problems, emphasizing important rather than trivial issues.* Take examples from arithmetic instruction—the significance of meaning and ways to develop meaning *vs.* the difference between adding up or down, or the difference between the equal addition and the decomposition method in subtraction. We might let beginners cut their teeth on some of these little problems, but the experts should concern themselves with larger issues.

We should seek not merely to collect surface facts but to *penetrate to the explanatory principles beneath.* In other words we should try to develop a theory or at least to test it. Theory does not spring from mere collections of facts. It comes from thoughtful analysis. Sometimes it seems more dependent on thought than experience, and we call it philosophy. Sometimes it seems to be more a generalization from experience, and we call it science. Sometimes it is a theorem which we arrive at somewhat intuitively and which we seek to verify by deductive reasoning and experimental verification. It frequently does not seem to have evident practical applications, but in the long run its practical effect may be revolutionary.

*Fundamental research requires analysis to get at underlying factors.* Such analysis may be statistical or experimental. Most statistical procedure is not analytical, but some is. In my opinion statistical analysis is not as conclusive as is experimental analysis. It reveals possible but not necessary conclusions. For example, factor analysis shows that ability may be composed entirely of elementary factors or of elementary factors plus a general factor. Perhaps this problem is not amenable to experimental attack, but if it is the result will be more conclusive. At any rate some form of analysis is necessary to get anything like an explanation.

There are a couple of less intrinsic features of good research that may be mentioned. *Productive research is cumulative.* The persons who have made a large impact on education through research are those who have followed up a group of problems through the years, as have Terman on gifted children, Buswell on reading, and Brownell on arithmetic, to men-

tion some of our colleagues and neighbors. The returns from such cumulative studies are in geometric rather than arithmetic ratio.

One final suggestion among these somewhat random observations. *Partisanship hampers productive research.* It may induce vigorous activity, but it leads to one-sided and therefore misleading explanations, and it leads to great waste of time and energy and the attempt to verify partial theories instead of pushing on to more comprehensive views. Since partisanship distorts thinking it is difficult to see how it could be beneficial.

## A Paradox

The alert hearer will have noticed that my talk doesn't hang together very well. My portrayal of the history of actual research does not agree with my advice on how to do research. Actual research has been more or less haphazard while ideal research is more systematic and planned. Two facts save me from serious contradiction. One is that there has been more planning and insight than appears on the surface. All the leaders have been acute students of their field, and their research has grown out of their study and reflection. It has never been mechanical and routine application of technique. The second is that they were exceptional intellects, and it is not always safe to follow such persons if they happen in some measure to break the rules. It is safer for the rest of us to play safe and not assume the prerogatives of genius.

---

## The Editors Say...

*(Continued from Page 194)*

The *Journal* will be the representative voice of educational research in California only as long as it is the favored recipient of the best reports of the best research that California researchers produce. Keep them coming, and we will spread the good news throughout the breadth and depth of the State. Fail us, and we shall become petty, quarrelsome, trivial, insignificant, and perishable. Contributors, we're in love with you, you, you!

---

## DR. KENNETH R. BROWN TO BE NEW EDITOR

Dr. Kenneth R. Brown, who has been serving as associate editor of the **California Journal of Educational Research** for the past four years, will become editor next January. He will succeed Dr. Frank W. Parr who has relinquished his position in the CTA Research Department to devote full time to the administration of the Association's special services. Dr. Brown's assistant on the **Journal** will be Dr. Garford G. Gordon, a former Los Angeles high school teacher. In assuming his new position as director of the CTA Research Department, Dr. Brown will also become chairman of the State Advisory Council on Educational Research.

# The Relationship Between Reading Ability and Literary Appreciation

DELWYN G. SCHUBERT

## The Problem

Is there a relationship between reading ability and literary appreciation? Is a college student's reading ability an important factor enabling his to discriminate between the writing of a Willa Cather, for example, and the work of a more mediocre author? Positive answers to these questions have important educational implications. They would mean that remedial techniques in reading might prove very helpful as one means of enhancing a student's literary appreciation.

## Procedure

Subjects for this study were one hundred college students. Fifty were retarded readers whose median score on an advanced form of the *Iowa Silent Reading Test* was twenty-five or less. These students were enrolled in the reading clinic at Los Angeles State College of Applied Arts and Sciences during the spring or fall semesters of 1952. Fifty unselected college students were matched for comparative purposes with the retarded group. These unselected cases were enrolled in the author's classes in remedial reading methods during the fall and spring semesters of 1952.

The college form of Carroll's *Prose Appreciation Test* was given to the foregoing students during a class hour. This test requires students to rank a set of four selections (fourteen sets are involved) in order of literary merit. The selections constituting each set are taken from four sources: "First choices, from books generally regarded as of excellent quality; second choices, from books generally regarded as of poor quality; third choices, from the less literary magazines; fourth choices, from mutilations."[1] The relative merit of the selections included in the test was determined by consensus of expert opinion.

## Results

The following table shows a slightly greater range and variability in the scores of the unselected group of readers. The mean score for the retarded readers is 44.90, while the mean for the unselected group is 47.02.

[1]H. A. Carroll, *Prose Appreciation Test*, Examiner's Manual, Educational Test Bureau, Inc., Minneapolis, Minnesota, p. 3.

*Dr. Delwyn G. Schubert is assistant professor of education and director of the reading clinic at Los Angeles State College of Applied Arts and Sciences. He is a graduate of Northwestern University where he earned his Ph.D. in 1949.*

**Unselected and Retarded College Readers Compared With Respect to Score on the Carroll Prose Appreciation Test**

| | *Retarded Group* | *Unselected Group* |
|---|---|---|
| | (N = 50) | (N = 50) |
| Highest possible score | 84 | 84 |
| Range | 16-72 | 17-74 |
| Mean | 44.90 | 47.02 |
| S.D. | 10.17 | 10.42 |
| $\sigma D$ | 2.08 | |
| Mean D | 2.12 | |
| t | 1.02 | |

The mean difference of 2.12 favors the unselected group. The standard error of the difference is 2.08 with a "t" of 1.02. For one hundred degrees of freedom (the "t" for ninety-eight degrees of freedom is not given), we find that a "t" of 1.98 is needed to meet the .05 level of significance.[2]

Since the obtained difference in this study is only 1.02 its standard error, we cannot state with any assurance that a true difference exists between the two groups of scores.

## Summary and Conclusion

The purpose of this study was to determine if a relationship exists between reading ability and literary appreciation. Two groups of college students were included in this investigation. One of the groups comprised fifty retarded readers; the other consisted of fifty unselected cases. These students took the college form of Carroll's *Prose Appreciation Test.* Raw score tabulation showed a mean score of 44.90 for the retarded group and 47.02 for the unselected. The mean difference was 2.12. The "t" at one-hundred degrees of freedom was 1.02. Since 1.02 is below the "t" required at the .05 level (1.98) the difference was considered insignificant.

The data clearly imply that college teachers cannot count on improving students' literary appreciation merely by stressing reading ability.

[2]J. P. Guilford, *Fundamental Statistics in Psychology and Education,* McGraw-Hill Book Company, Inc., New York, 1942, p. 324.

---

The California Educational Research Association has announced that its annual conference for the current school year will be held March 19 and 20, 1954, on the University of California Campus at Davis. Those interested in presenting papers at the Conference should contact Dr. Merle H. Elliott, Director of Research, Oakland Public Schools, 1025 Second Avenue, Oakland 6, California.

# Needed Research in the School Plant Field

T. C. Holy

I THINK we would all agree that one of the very strong reasons for research in the school plant field in California, as elsewhere in the nation, is the great need for additional school housing at present and in the immediate future. That, of course, is a result of the very rapid increase in school enrollment within the last two or three years, and the expected even greater increase in the years ahead. In California the State Department of Finance, which has been and still is conducting studies on predicting both school and college enrollment in the State, has estimated that by October 31, 1956 there will be 2,621,700 pupils enrolled in kindergarten through grade 14 in the state, which is an increase of 704,000, or 37% above that for the current year (1952-53). If one assumes a classroom will accommodate 30 pupils, then this estimated increase would require 23,466 classrooms. This figure, of course, does not take into account the continuous need of replacing worn-out and obsolete buildings.

In an attempt to translate the building needs of the State into dollars as of October, 1952, the figures provided by the California School Facilities Survey gave that estimated figure as $923,544,000. If to this figure is added the estimated cost to provide the additional needs for the next four years, which figure is approximately one billion dollars, (this rough estimate has likewise been furnished by the School Facilities Survey staff), then the total estimated cost of school building needs in California for the next four years amounts to nearly two billion dollars. Although we have been accustomed to dealing on a national scale in billions and tens of billions of dollars, this figure is a substantial one for any given state. It is difficult to conceive of any private company or corporation contemplating an expenditure of these proportions without the most careful and exhaustive analysis and study, both before and during the process of all the various aspects of the program. Yet in this field we go right ahead making these huge expenditures with a minimum amount of research and investigation.

Although the population specialists predicted immediately following the war a rather sharp drop in the birthrate for the years directly ahead, that prediction has not materialized, as is evidenced by the fact that here

*Dr. Thomas C. Holy over the years has been recognized as one of the outstanding authorities in the school plant field. He has held many important research positions and only recently retired from the directorship of the Bureau of Educational Research, Ohio State University. Dr. Holy for the past year has served as special consultant in higher education at the University of California, Berkeley. His article is based on a paper by the same title which was presented at the Fourth Annual State Conference on Educational Research on November 7, 1952.*

in California the total number of births in 1951 was 260,559, as compared with 245,889 in 1947, which was the highest previous number in the history of the State. Some indication of the problem of providing school housing beyond the four-year period mentioned above is found, I believe, in a comparison of the age distribution of the California population for 1940 and 1950. Although during that decade the total population of the State increased 53.3%, the number of children under 5 years of age increased from 453,494 to 1,107,000, or a percentage increase of 144.1%. In the case of the 5 to 9 year age group the percentage increase, although not quite so striking, was actually 92.4%, as compared with the over-all increase of 53.3%.

Some time ago when we were trying to get funds for research in the school plant field, a president of a Midwestern university made the comment that because of the many variables in the school plant field and the difficulty of getting funds to carry on controlled research, that perhaps it would be better to get the composite judgment of experienced men in the field and use those judgments in lieu of actual research. Such a point of view, which I think is shared by a good many people, raises the basic question as to why research should be carried on in this important field in public education. Phrasing the question in another way, what contributions will better planned, better lighted, better equipped, and more sanitary school buildings make to public education in California and elsewhere in the nation? To answer that question specifically is, of course, difficult because of the many other factors that contribute to improving public education in the nation. Several years ago we did get some specific information in 10 school districts in Ohio where there had been poor buildings and where subsequently and still under the same superintendents new buildings had been provided. We found that without exception in these communities schools were better supported, there was larger community participation in school affairs, and in the judgment of the superintendents, education was better regarded in the community as a whole. Also in a state-wide study of school buildings in West Virginia we found that the counties having the best school buildings in terms of types of materials and construction ranked highest on a rating scale somewhat similar to that originally devised by Leonard P. Ayres. Conversely, we found that the county having the poorest buildings in terms of these criteria was at the lower end of the rating scale. Although the specific evidence on this point is rather difficult to get, it seems a reasonable assumption that better buildings and better equipment do make a substantial contribution to the quality of the educational program.

I think appropriate to this point is a comment of Charles F. Kettering, the Director of Research for the General Motors Corporation. In response to a question as to what was the main objective of that research he replied, "to make people dissatisfied with their present automobiles." I

think without question one of the better by-products of better planned buildings is the effect which these have on communities with buildings poorly planned for their educational program.

## Areas Needing Research

Turning now to the areas in the school plant field which it seems to me are in need of careful investigation, I will draw heavily from the *1949 Yearbook* of the American Association of School Administrators, which has the title, *American School Buildings*. However, the parts from which I will draw for this discussion are found in the sections of that Yearbook which I, as a member of that Commission, prepared in the original draft. These problems, which have been brought together over a good many years and which represent the considered judgment of a large number of people engaged in the school plant field, are grouped under the three following headings: School-Building Planning; Building Materials, Construction, and Equipment; and Service Systems.

## School-Building Planning

1. The size, selection and location of school sites.
2. The number of square feet of classroom floor space per pupil in the various types of instructional rooms.
3. Proportion of floor space which should be allotted to different school activities, such as administration, library, physical education, health, shops, laboratories, classrooms, and community needs.
4. Location of different types of rooms in the buildings in order to meet educational requirements most efficiently. Rooms which should be contiguous are often found to be widely separated, thereby causing unnecessary travel, congestion, and expense in administration.
5. Reliable methods of determining the room requirements for a given educational program. New York State has made considerable progress in meeting this problem in its own program.
6. Flexibility in design and construction to meet rapidly changing educational requirements. Rooms too small or too large to house activities which they must serve result either in unnecessary teaching costs or in the waste of space and higher operation costs.
7. Expansibility. It is extremely important that school buildings be located, planned, and constructed so that additions can be made easily and economically.
8. Standards of training for architects, engineers, and superintendents in connection with school planning and designing.
9. Long-range planning. State-wide master plans should be developed to analyze population, migration, growth in rural and urban communities, highway development, and land utilization trends.
10. School transportation. The present administration of transportation is, in many cases, impractical and extravagant. Without definite planning in many school districts, it has become a major item of current expenditures.
11. Analysis of financial plans of the states to equalize capital outlay programs.
12. Comprehensive cost analysis studies of buildings and equipment.
13. The development of more uniform, comprehensive, and accurate records on the school plant among the states.

## Building Materials, Construction, and Equipment

1. Maintenance and operation costs in relation to the size of building and type of construction. Casual evidence indicates marked differences in the cost of administration, operation, and maintenance of one-, two-, and three-story buildings, and between buildings of different sizes and types of construction.

2. Optimum building size, in relation to construction, operation, and maintenance costs.
3. Satisfactory building materials, taking into account original cost, availability, and utility.
4. Efficient and economical planning and installation of instructional and service equipment. The use of valuable floor space is frequently lost through faulty design and location of equipment.
5. Adequate study of the design, performance, specifications, and standards of instructional and service equipment.
6. Acoustics. There is a need to study the effects on pupils and teachers, the satisfactory methods of acoustical treatment of the different space facilities in school buildings, and the general educational benefits of acoustical treatment.
7. Design, decoration, and color, both inside and outside school buildings, including landscaping, as they affect pupils.

## Service Systems

1. Lighting, both natural and artificial.
2. Heating and ventilating.
3. Further studies of toilet requirements and their location. The evidence cited later in this paper indicates that present standards are unduly high.
4. Drinking and washing facilities and their location.
5. The values of germicidal lighting and aerosols.
6. Intercommunication systems and audio-visual facilities.

## Lighting, Heating and Ventilation Problems

You will note that Item No. 1 under Service Systems is "Lighting," both natural and artificial. As evidence of some of the problems in the field of school lighting and on which further experimentation and study are undoubtedly needed, I list the following:

1. The effect of different types of window shades and wall paints on natural lighting.
2. The effect of window mullions of different widths upon natural lighting and the visbility of chalkboard writing.
3. The psychological effects of long working exposure with low and high intensities of natural lighting on the working surface.
4. The physiological effect of fluorescent lighting on the eye.
5. The effect of natural lighting below eye level.
6. The relative illumination from clear glass windows and glass blocks.
7. The effects of lateral chalkboards on desk lighting.
8. The amount of wattage of energy per square foot of floor area, with proper luminaires and outlet distribution.
9. The feasibility of automatic photronic control as a solution of light variability.
10. The effect of orientation, ceiling heights, and room widths on lighting.
11. Lighting standards for different school activities.

Under the general heading of "Heating and Ventilation" there are likewise a number of problems yet unanswered. However, I am not including those here because the problem of heating and ventilation is not so pressing a one in the California climate as in some other parts of the country. However, I think the foregoing list, while not at all exhaustive, gives some indication of important areas in the school plant field on which further information is needed, and in the supplying of that information both controlled research and study are required.

## Sources of Answers

Turning now to the question as to what efforts have been made to find satisfactory answers to these problems, may I say that the National Coun-

cil on School House Construction, which was organized in 1922, has long been interested in finding the appropriate answers to these questions. Unfortunately, however, this organization has a small membership and consequently very little funds other than those needed for its own operation. Since it could not carry on extensive research, it has followed the next best procedure; namely, that of setting up standards based on the composite judgment of these experienced people in the field. Those standards, which now appear under the title of, "Guide for Planning School Plants," have had a very significant part in school buildings as now designed and constructed. As evidence of the continued interest of this organization in this field, it created more than a year ago a Committee on School Plant Research and Publications. However, as a member of that Committee I do not believe that we will be able to do much actual research unless we are more successful in getting financial support than heretofor.

In 1935 I discussed the need for research in this field with Dr. George F. Zook, then President of the American Council on Education, pointing out to him that at that time about 35% of all the money expended for public education went to construction, operation and maintenance of school plant. He was much interested in the need and shortly thereafter created as one of the standing committees of the Council a Committee on School Plant Research. Subsequently this was changed to "School Plant Research Committee," and later to the "Committee on Educational Buildings and Equipment." This Committee, on which I served from the beginning and was its chairman for several years, continued until 1950, when it was temporarily discontinued because we were not able to get funds to carry on our research program. Despite persistent efforts by Dr. Zook with the various educational foundations and similar efforts on the part of the Committee membership, as well as other interested persons, we were able to secure only $30,000, and that for experimental work in school furniture. Although I think without exception the various foundations approached recognized the need for investigation in this field, they concluded that it was outside the range of their field of operation.

In addition to the publications on specifications for school furniture, the Committee did carry on a study of significance in the utilization of sanitary facilities. Through actual time tests carried on in 39 schools located in 15 states and in Canada, it was found that the actual needs for sanitary facilities were from ⅓ to ½ below the standards set up in codes or regulations found in a number of states and large cities. Since that study came out a number of these codes and regulations have been changed to conform with its findings. Although further investigation is needed in this area, I think this study illustrates what would undoubtedly result either in terms of savings or better facilities or both, if an adequate program of research were set up in the school plant field.

Effort was likewise made to interest the American Association of School

Administrators in this project. Again the Association expressed its keen interest in this need; but, like the National Council on School House Construction, had no funds to subsidize research. I should add that during the lifetime of this School Plant Committee of the American Council on Education there were a few opportunities when it might have secured funds from commercial sources. However, the Committee took the position that that might not prove to be in the best interests of the public schools of the nation. Consequently, those opportunities were not accepted.

So much for the efforts, generally unsuccessful, to get an adequately supported and long range research program underway in the school plant field. The $64 question with which I am sure you are concerned here tonight, is what, if anything, can be done on this proposal here in California, where as much as two billions of dollars will be spent for school housing in the next few years?

## Practical Suggestion

I have one suggestion to offer. Of the great universities of the nation, the University of California is outstanding, among other areas, in the field of research. An examination of the support given to research in the year 1950-51 shows that there was expended in the University of California for organized research other than that carried on as a part of the instructional program, $5,152,741.90. That expenditure was distributed under 206 different headings, among these were the Bureaus of Business and Economic Research, Government Research, and Public Administration—all three of which had sizeable amounts for their research programs. To me it seems very appropriate for the public schools of California to look to the University for help in the solution of their problems, since it is a tax supported instituion and an integral part of the public education system of the State. It, along with the public school system, has in accordance with Section 15, Article XIII of the State Constitution, the unique distinction of having firs claim on all state revenues for support.

With the tremendous needs for additional school housing in the State, as already noted, with the enormous need for research in this field and the unusual support which the University of California gives to organized research, I think your best chance in dealing with this problem in a significant manner is through the use of the state and local facilities. I am confident that if some such research institution or bureau were set up, it would find an excellent spirit of cooperation and assistance in the State Department of Education, the school governing boards, and in the administrative and research personnel of the public school system of California. It could also result in California achieving national leadership, based upon research, in the field of school housing. The contribution which could thus be made to the educational process, through the school housing field, would be among the most significant advances in our educational research history.

# A Study of Emotionally Disturbed Children in Santa Barbara County Schools

NORAH CLANCY and FAITH SMITTER

A STUDY of the special needs of all elementary children in the Santa Barbara County schools was initiated in March, 1952, and completed in October. The reasons for the study were twofold: First, to obtain factual information for the guidance department as to the extent and the nature of the special needs of elementary school children in the county. Secondly, it was hoped that the process of identifying children with special needs and considering their problems would assist the teachers in understanding these children and might lead to desirable changes in the teaching practice.

## Procedures of the Study

To insure uniform procedures in reporting children with special needs, the Bureau of Special Education of the California State Department of Education and the supervisory and guidance staffs of the County Superintendent's Office and the Public Health Nurses assisted the teachers in identifying such children. This assistance was given to teachers either individually or through the several regional meetings held throughout the county. To further reduce variations in teachers' reports and the possible effects of the teachers' own personalities upon their judgment, descriptions from the research literature regarding children's problems were given teachers as guides to identification of children with special needs. In order to give the study further validity the teachers were asked to describe the behavior which indicated a special need on the part of each child listed. Any child whose behavior according to the description given by the teacher did not seem to warrant inclusion in the study was not listed. The study included children whose behavior placed them in the following categories:

| | |
|---|---|
| Gifted and talented children | Defective speech |
| Mentally retarded | Serious reading difficulties |
| Emotionally disturbed | Special family conditions |
| Serious health problems | |

*Dr. Norah M. Clancy is acting assistant professor of education at the University of California, Santa Barbara. Her prior professional experience includes teaching at the University of Georgia and New York University, directing the Child Care Center at New Haven, Connecticut, and serving as consultant in the Child Care Program in the California State Department of Education. Dr. Clancy completed her Ed.D. degree at the University of California, Los Angeles, last summer. The present article is a digest of her dissertation.*

*Dr. Faith Smitter is director of guidance for the Santa Barbara County Schools She had formerly served as consultant in the California State Department of Education, and as coordinator of research and guidance in the Los Angeles County Schools Dr. Smitter earned her Ed.D. degree at the University of California, Berkeley, in 1951. She worked with Dr. Clancy in conducting the study herein reported.*

A summary report of the total study appeared in the March 1953 issue of this Journal. This article is a report on the findings of children who were identified by teachers as being seriously emotionally disturbed.

## Related Research

During the past two decades a tremendous amount of research has been published regarding the emotional difficulties of children. The perspective of related research gives direction to the study of any problem and throws significant light upon the findings. The following factors stand out in the results of these studies as significant in relation to the emotional disturbance of children.

Parental influence as an important source of behavior maladjustments among children has been studied by a number of investigators. Levy (1) studied the effect of excessive mothering on children. In his now well-know book entitled *Maternal Overprotection*, Levy emphasized that children who have indulgent overprotective mothers have a difficult time in their emotional adjustment. When a mother does not require respect and submission to ordinary household tasks this weakness on her part produces disobedience and impudence in the children at home accompanied by bullying, fighting and rebellious behavior at school and with age mates.

During the late 1930's, several students of child behavior (2, 3, 4) were impressed by the frequency with which children who were delinquent seemed to have no deep feelings for anyone. These children were difficult to treat, and were found to have seriously disturbed relationships with their mothers during their early years.

Since these early studies, effects of deprivation of mother love in early years have been studied by a large number of pediatricians, psychologists, and child psychiatrists. Goldfarb (5), Spitz, (6) Bakwin, (7) Gesell and Armatruda (8) are in agreement from their studies of infants and young children that deprivation of mother love can have a seriously adverse effect on the emotional well-being of children. Goldfarb points out that the earlier the age at which depriving experiences are initiated and the longer the duration, the greater the extent the maladjustment is likely to be.

In studying the emotional aspects of the parent-child relationship several investigators have studied the effect upon children when the father is absent from home. These studies, particularly those of Bach (9), Stolz, (10) Sears and Pitner (11), seem to point to the fact that when the father is absent from the home that children have less tendency to aggression than children whose fathers were at home. With the fathers at home, there is a possibility, according to Stolz "that even in America, fathers may be more punishing than mothers, and the conflicts in mother and father discipline may become frustrating for young children."

Several investigators have studied the broken home as an influence upon the emotional well-being of children. Many studies show that chil-

dren from broken homes develop less favorably than do others who are not deprived of a normal home life. However, as Wallenstein (12) has pointed out too many factors are inherent in the situation to give validity to the concept that the broken home per se is a cause of emotional maladjustment. Parents' conflicts, parents' emotional immaturity and the deprivation of affection are likely to be important influences in a broken home.

The effect on the emotional well being of young children of a mother's employment outside the home has been the basis for numerous popular articles and some research studies. The reasons why mothers seek employment outside the home seems to be the key to whether or not children are adversely affected. It has been pointed out in several studies (13, 14) that it is not alone the time which a mother spends with her child, but the emotional response she gives him within the time spent that is most significant. Certain mothers are better mothers because they work. They are happier and therefore are able to give greater emotional gratification to children.

Many other causal factors exist besides a child's relationship with his parents which contribute to emotional maladjustment. It has been well established that children who come from homes in which a foreign language is predominantly spoken frequently have problems of an emotional nature. Factors in the school situation itself often contribute to or increase children's maladjustment. As Rivlin (15) has pointed out, the exaggerated importance which schools attach to marks, the overemphasis placed on speed, overemphasis on subject matter, and unnecessary examinations are procedures which frequently contribute to the emotional disturbance of children.

The emotional factors in learning are being studied with increasing frequency by psychologists. Failure to learn what is expected may lead to frustration or fear. Many studies have been made on reading failure as a cause of emotional difficulty, but as Robinson (16) points out emotional difficulties may contribute to reading disability in the beginning and may in turn cause further blocks in learning which in turn further intensifies the frustration. Gates (17) in a recent summary of studies of emotional and personality problems in relation to reading disability, expresses the opinion that emotional problems are present in about 75 per cent of retarded readers, but that in only one-fourth of these is it a sole cause of the disability.

## Findings Regarding Emotionally Disturbed Children

Santa Barbara County teachers reported 846 children or 11 per cent of the school population as emotionally disturbed. Of this number 544 are boys and 302 girls, showing a consistent difference in the problems of boys and girls. Not all school districts reported the same degree of emotional

disturbance among the children. Certain school districts reported as high as 35 per cent disturbed, while others as low as 5 per cent. In interpreting these figures certain factors must be taken into account. Districts vary in living conditions, community problems, and recreational facilities, which affect the emotional health of children. Teachers also vary in their sensitivity to children's problems and their awareness of children's needs. School procedures vary with regard to their adaptability to the needs of children. However, on the whole the report of emotional disturbance shows a certain consistency in the per cent listed by grade. The following table shows the number and per cent of emotionally disturbed children reported at each grade level:

## TABLE 1

**Number and Per Cent of Emotionally Disturbed Children Reported in Each Grade**

| *Grade* | *Number of Emotionally Disturbed Children* | | *Per Cent of the Total Grade Enrollment* |
|---|---|---|---|
| | *Boys* | *Girls* | |
| Kindergarten | 33 | 18 | 5 |
| First Grade | 71 | 51 | 11 |
| Second Grade | 75 | 45 | 11 |
| Third Grade | 76 | 43 | 11 |
| Fourth Grade | 78 | 41 | 12 |
| Fifth Grade | 57 | 34 | 11 |
| Sixth Grade | 48 | 28 | 11 |
| Seventh Grade | 33 | 20 | 10 |
| Eighth Grade | 47 | 16 | 13 |
| Special Training Classes | 22 | 5 | 21 |
| No Grade Reported | 4 | 1 | |
| Total | 544 | 302 | |

The above table raises several signficant questions: "Is the low per cent of children described as emotionally disturbed in the kindergarten due to an actual smaller per cent of emotionally disturbed at this age level?" or "Do kindergarten procedures allow for greater flexibility with a consequent fewer number of adult-child conflicts or child-child conflicts?" The per cent of emotionally disturbed children in the eighth grade shows a slight increase over other grades. This may be due to the problems of adolescence or to community and school pressures, which have increased at this age level. The high per cent of children who are emotionally disturbed in the special training classes is significant. The emotional disurbance of many mentally deficient children seems to be inherent in the problem of mental deficiency. Although 21 per cent of mentally retarded

children enrolled in special training classes are reported as emotionally disturbed, 42 per cent of the mentally retarded enrolled in the regular grades were reported as emotionally disturbed. These findings would seem to indicate that mentally retarded children adjust more satisfactorily in special training classes than they do in the regular classroom. The results of these findings also are in agreement with the research on the adjustment of mentally retarded children who are in the regular classroom.

Less than half or 344 children reported because of emotional disturbance had IQ's recorded. The following table shows the distribution of IQ's of the emotionally disturbed children for whom test data were available:

**TABLE 2**

**Number and IQ Distribution of Emotionally Disturbed Children**

| *IQ* | *Number* |
|---|---|
| 140 + | 3 |
| 130 — 139 | 2 |
| 120 — 129 | 12 |
| 110 — 119 | 27 |
| 100 — 109 | 57 |
| 90 — 99 | 68 |
| 80 — 89 | 83 |
| 70 — 79 | 56 |
| 60 — 69 | 31 |
| 50 — 59 | 3 |
| — 49 | 2 |
| Median — 89 | |

No IQ given for 502

Table 2 shows that emotional disturbance is not associated solely with a particular IQ level. Deficient, average, and superior children are reported as emotionally disturbed. However, the median IQ of 89 does indicate that dullness and emotional disturbance have a positive relationship. Teachers should consider the mental hygiene hazards of dullness and should assist the dull child to develop all the competencies possible in meeting the problems of life.

Of the children who were reported as emotionally disturbed 272 or 32 per cent came from broken homes. This is more than twice the per cent of children in the total school population who come from broken homes. Obviously, a relationship exists between a broken home and an emotionally disturbed child. Whether the same factors that cause the broken home also cause the emotional disturbance of the children is not known. However, it is clear that a broken home is a danger signal for teachers. Teachers should be aware of the strains in relationships in a broken home, the anxieties and insecurities which these create in children. The knowledge of a broken home should indicate to a teacher that the child coming from such a home needs more reassurance and support than children from normal homes.

Twenty-three per cent or 194 of the emotionally disturbed children had mothers who worked on a full-time basis. Only 14 per cent of the total school population had mothers who worked full time. These figures indicate a relationship between the full-time employment of mothers and the

emotional disturbance of children. Again, it is not clear from these data whether the employment of mothers actually caused the disturbance or whether the same factors that caused the emotional disturbance of children also caused the necessity for the employment of mothers. But again, the full-time employment of a mother should be a signal to teachers that a child whose mother is employed needs greater support, greater reassurance, and more attention if emotional problems are to be avoided.

Of the children reported as being emotionally disturbed 21 per cent or 178 were reported to come from homes having conditions inimical to the welfare of these children. Alcoholism, overcrowded conditions, and poverty were the most frequent conditions described by teachers.

Only 5 per cent of the total child population was described as coming from homes in which such serious conditions prevail. Obviously, a positive relationship exists between emotional disturbance and serious home conditions, although again it is not clear just what this relationship implies. However, information on the child's cumulative record indicating that such conditions exist in the child's home is a signal to teachers that special compensations must be made at school to overcome the inadequacy of the home life.

A comparison of the per cent of children reported as emotionally disturbed, who have unusual home conditions, and the per cent of others of the school population having similar home conditions is shown in Table 3.

## TABLE 3

**A Comparison of the Per Cent of Emotionally Disturbed Children Who Have Unusual Home Conditions to Others of the School Population With Similar Home Conditions**

| *Home Conditions* | *Per Cent of Emotionally Disturbed* | *Per Cent of Others* |
|---|---|---|
| Broken Homes | 36 | 11 |
| Mothers Employed Full Time | 23 | 12 |
| Serious Neglect or Deprivation | 21 | 3 |
| Foreign Language Background | 20 | 10 |

Analysis of the types of broken homes from which emotionally disturbed children were reported yielded the information in Table 4.

Although the numbers are small, the above findings seem to indicate that children who are adopted show a higher per cent of emotional disturbances than children from other types of broken homes. Children from homes in which a real parent has remarried show a lower incidence of emotional disturbance than those from other broken homes.

Teachers' descriptions of all the emotional disturbances reported fell into the categories shown in Table 5.

## TABLE 4

**The Number and Per Cent of Children From Certain Types of Broken Homes Who Showed Emotional Disturbance**

| *Type of Broken Home* | *Number of Children* | *Per Cent* |
|---|---|---|
| Foster Parents | 21 | 30 |
| Adopted | 17 | 45 |
| Mother Alone | 59 | 24 |
| Father Alone | 11 | 30 |
| Stepparent and Mother or Father | 80 | 21 |
| Relatives and Mother or Father | 30 | 33 |
| Relatives Alone | 47 | 29 |
| No Type Stated | 47 | |
| Total | 312 | |

In addition to these categories teachers mentioned such behavior as overly conscientious and docile, extremely negative, overly interested in sex, moody, erratic, confused, no interest in school, cheats, lies, steals, cruel, enuretic, epileptic, and the like. The major complaints by teachers were withdrawal from the group with related fears and anxieties and inability to get along with others. Wickman's[1] study of some twenty-five

## TABLE 5

**Types and Per Cent of Emotional Disturbance Reported**

| *Types of Disturbance* | *Boys* | | *Girls* | |
|---|---|---|---|---|
| | *Number* | *Per Cent* | *Number* | *Per-Cent* |
| Withdrawn | 132 | 24 | 131 | 43 |
| Unable to Get Along with Agemates | 162 | 30 | 95 | 31 |
| Agressive | 134 | 25 | 43 | 14 |
| Immature | 74 | 12 | 44 | 15 |
| Excessive Nervousness | 85 | 16 | 27 | 9 |
| Short Attention | 82 | 15 | 21 | 7 |

years ago pointed out that teachers mentioned the aggressive and belligerent child most frequently as a problem. The fact that Santa Barbara teachers described the withdrawn and fearful child most frequently indicates a greater sensitivity on the part of modern teachers to the mental hygiene problems of children than that shown by teachers twenty-five years ago.

[1]E. K. Wickman, *Children's Behavior and Teachers' Attitudes* (New York: The Commonwealth Fund, Division of Publications, 1928), pp. 15-17.

## Teachers' Comments

The following comments by teachers are typical of the problems of children reported as emotionally disturbed:

"Inclined to be noisy, inconsiderate, overly aggressive at school. Antagonizes others in group. Annoys and interrupts classroom procedures."

"Agressive toward girls. Takes toys and money. Always in difficulty with some member of the class."

"Dreamy and inattentive in school. Immature. Does not seem interested in group play."

"Timid and insecure. Child fearful of dress in painting or other activities. Was severly beaten by mother at one time. Worried and harassed expression. Does not join freely and happily in group activities. Inhibited and self restricted. Plays only after persuasion and then with anxious air about clothes."

"Class rejects child. Numerous serious fights. Child 'hates' school, particularly arithmetic where performance is poor."

"When talking to adults, uses baby talk. Is 'sneaky.' Always probing adult's motives. Constantly fabricates and uses alibis. Fights a good deal. Bed wetting (father reports)."

"Uninterested, bored, listless. At times sullen. Anti-social, 'light fingered,' lies, copies work, seems lazy. Does not care about learning. Hits, pinches, trips up children, throws rocks. Bad influence in group as younger boys imitate and follow. Girls seek him out in games for partners."

"Sucks thumb. Can't sit still. Talks constantly. Overly dependent. Complete busybody and tattletale. Not well liked or chosen by mates."

"Boy is *very* restless, nervous, aggressive, teases and torments other children. Shows need for affection. Academic progress surprisingly good."

"Can't stand discipline. Flies into a temper. Gets attention by pestering all near him — then can't take pestering in return. Used to run away from school when disciplined. No sense of family security."

"He feels insecure. He is a cry baby. Doesn't concentrate well. Will not learn unless material is force-fed to him."

"Has 'far away in the fog' air about him. Can't get through the fog to teach him. Lives with mother. Father was in mental hospital."

"He is a very large boy. He uses his size to pick on others. He likes girls, but mother forbids any association with girls. He is not liked by classmates."

"Child is deeply disturbed emotionally. Poor coordination. Shaky voice. Very nervous. Is so emotionally rattled that he accomplishes little in school. Disliked by other children because of showing off and inability to do anything without breaking or destroying it."

"In a daze. Completely unaware of everything around him. Accepted by other children but pays little attention to them."

"Child pale and listless but works to capacity. Oblivious of other children. Usually shunned because of body odor."

"Loud talking disrupts class often. Attracts attention with unusual hats and ties. Exaggerates actions."

"Doesn't do his work. Bothers others. Always trying to get even with someone."

"Overly interested in sex. Writes compositions that drip with gore. Sketches murders, knives, guns, fires, blood flowing. Sly, not always to be trusted. Is a daydreamer. Has friends among boys. Girls find him too 'bloody' for their tastes. Draws all over his papers."

"The world is too much for him. Cannot do schoolwork. Just doesn't know the score. Tries to look like a student. A perfect picture of defeat."

"Bitter because she is a Mexican. Thinks the world is against her. Learning is affected because she broods instead of working. Has the idea that no one would be her friend — so why try to make friends?"

"Hearing loss. Wears big bulky hearing aid. Lack of knowledge of how to work it. Batteries often dead. Fears to try anything without a great deal of personal help."

## Children From Homes Using Foreign Language

An analysis was made of the problems which children present, who come from homes in which a foreign language is spoken. Table 6 indicates the per cent of children from homes in which a foreign language is usually spoken who have such problems and the per cent of children from homes in which English is spoken who are reported as having similar problems.

### TABLE 6

**Per Cent of Children Having Problems From Foreign- and English-Speaking Homes**

| | *Children From Foreign-speaking Homes* | *Children From English-speaking Homes* |
|---|---|---|
| Gifted | 0 | 0.9 |
| Mentally Deficient | 16 | 3 |
| Emotionally Disturbed | 20 | 10 |
| Speech Defective | 5 | 2 |
| Reading Problems | 3 | 1 |
| Receiving Free Nutrition | 9 | 1 |
| Need Free Nutrition | 2 | 0.2 |
| Family on State Aid | 9 | 1 |
| Mothers Employed | 18 | 14 |
| Broken Homes | 24 | 14 |
| Serious Home Conditions | 20 | 3 |
| Health Problems | 22 | 10 |

The above data make it apparent that these children have many more problems than children from homes in which English is usually spoken.

In not one area investigated did the children from foreign-speaking homes have fewer problems than those of the English-speaking children. Obviously, these bilingual children have definite handicaps to adjustment and learning.

## Implications of the Study

The above findings indicate that emotional disturbances of children are frequent enough to constitute a major problem in education. It is also apparent that an approach to these problems cannot be made solely on an individual study basis, as a clinical approach to the problems of 11 per cent of the child population is not feasible. Nearly every teacher in the county reported one or more emotionally disturbed children in his classroom. These facts indicate that teachers must be assisted to deepen their understandings of the causes of behavior and the factors involved in emotional disturbance. The implications are for psychological service which will direct its attention not only to the study of children with serious problems but primarily to the in-service education of teachers in child growth and motivation.

Implications also are inherent in these data for education on an upper grade and high school level directed toward preparation for family life, an understanding of self, and an understanding of the causes of disturbed behavior. Only through an educational program which includes such a mental health orientation can a comprehensive approach be made to such a large problem.

Educators should direct their attention toward eliminating school procedures and curricula which contribute to anxieties, fears, and frustrations of children. It is probable that many emotional disturbances may originate in the home. However, the school should evaluate its program to determine whether it contributes to or compensates for the inadequacies of children's out-of-school lives.

## BIBLIOGRAPHY

1. Levy, David, *Maternal Overprotection.* New York: Columbia University Press, 1943, 417 p.
2. Glueck, S. and Glueck, E. T., *One Thousand Juvenile Delinquents.* Cambridge: Harvard University Press, 1934. 341 p.
3. Armstrong, C. P., *660 Runaway Boys.* Boston: D. C. Heath, 1932. 208 p.
4. Stott, D. H., *Delinquency and Human Nature.* Dunfermline, Scotland, Connely Park House, 1950. 460 p.
5. Goldfarb, W., "Variations in Adolescent Adjustment of Institutionally Reared Children", *American Journal of Orthopsychiatry,* XVII, July, 1947. 449 p.
6. Spitz, R. A., and Wolf, E. K. M., "The Smiling Response: A Contribution to the Ontogenesis of Social Relations." *Genetic Psychology Monograph* XXIV, Aug., 1946. 57 p.
7. Bakwin, H., "Loneliness in Infants" *American Journal Diseases of Children,* LXIII, Jan., 1942. P. 30.
8. Gesell, Arnold and Armatruda, C. *Developmental Diagnosis: Normal and Abnormal Child Development: Clinical Methods and Pediatric Applications,* 2nd ed. New York: Hoeber Co., 1947. 496 p.

*(Continued on Page 222)*

# Do Modern Schools Provide Sufficient Time for the Teaching of "Fundamentals"?

James P. Wilson

RECENTLY there has been frequent criticism of our modern courses of study by the lay public. It is claimed that these courses of study do not provide for subject matter and time allotments leading to learning of the "fundamentals" in elementary schools.

Due to this oft-repeated criticism, this investigation involves an evaluation of the courses of study in the San Jose Unified School District in 1918-19 and 1951-52. The purpose of the evaluation was to determine if the schools are providing time for the teaching of the "fundamentals" today, and if the enrichment subjects have imposed an undue shift of time allotments from so-called "fundamental' subjects.

## Procedure

The data were gathered from the actual teachers' programs in use in the classrooms in grades one to six for the school year 1951-52. Programs of the sixteen elementary schools of the San Jose Unified School District were sampled. Seven elementary schools in San Jose, each representing a distinct socio-economic group, were used as a source for this material. These instructional programs were recorded to get an accurate record of what was being done and, as a further check of this, visits to the various rooms were made at unannounced times to see how closely the program guide was followed as to subject and time allotment. Conferences were held with the superintendent, supervisors, and teachers.

For comparison with the earlier period, teachers' programs as recorded in their registers for the year 1918-19 were sampled for grades one to six. While there could be no assurance that equivalent socio-economic groups could be selected, it was believed that this difficulty would not invalidate the method of comparison. It was obviously not possible to conduct interviews with personnel of the earlier school year.

From these data, tables were prepared giving the average minutes per week allotted to each subject and to each Primary Block (grades 1-3) and Intermediate Block (grades 4-6).

*James P. Wilson is an elementary school principal in the San Jose Unified Schools, San Jose, California. Previously he had taught in the elementary schools of San Jose, and Fort Bidwell, California. Mr. Wilson was awarded his M.A. degree at the University of California, Berkeley, in 1952. The present article is a digest of his Master's thesis.*

## Findings

The time in the school day was found to be differently apportioned in 1951-52. However it was the judgment of teachers and supervisors that the time previously devoted to the fundamental skills was more wisely apportioned and better applied to the objectives of the current program of instruction. It was believed the time differences between the amount of time given to the "fundamentals" in 1951-52 and in 1918-19 were of no significance in the final matter of pupil achievement.

Table 1 presents a comparison between the average minutes per week allotted to each subject and grade level in the elementary school for the years 1951-52 and 1918-19 in the San Jose Unified School District. In this table, physical education and recesses were grouped together to shorten the table. However, they are present as separate periods, and physical education is an instructional period. The data in Table 1 will support the results on the following pages which summarize the completed investigation.

### TABLE 1

**Time Allotments for Subjects in the Elementary Curriculum in Terms of Subject, Grade, and Average Minutes Per Week in the San Jose Unified School District for 1951-52 and 1918-19.**

| | AVERAGE MINUTES PER WEEK BY GRADE AND YEAR | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Subjects | 1 | | 2 | | 3 | | 4 | | 5 | | 6 | |
| | 1951 | 1918 | 1951 | 1918 | 1951 | 1918 | 1951 | 1918 | 1951 | 1918 | 1951 | 1918 |
| Reading | 402 | 439 | 361 | 311 | 351 | 360 | 249 | 315 | 246 | 240 | 242 | 212 |
| Arithmetic | 86 | 100 | 100 | 214 | 194 | 207 | 239 | 278 | 248 | 186 | 242 | 228 |
| Social Studies | 171 | 0 | 179 | 0 | 211 | 41 | 215 | 239 | 207 | 236 | 203 | 272 |
| Language | 61 | 193 | 71 | 154 | 96 | 122 | 105 | 228 | 119 | 258 | 113 | 208 |
| Spelling | 0 | 21 | 51 | 157 | 113 | 139 | 107 | 132 | 112 | 89 | 103 | 111 |
| Writing | 80 | 89 | 77 | 70 | 68 | 75 | 53 | 80 | 48 | 59 | 57 | 67 |
| Music | 74 | 71 | 74 | 88 | 74 | 68 | 81 | 69 | 83 | 62 | 82 | 69 |
| Art | 75 | 46 | 75 | 35 | 66 | 33 | 65 | 51 | 66 | 44 | 73 | 35 |
| P. E. & Recess* | 241 | 164 | 249 | 129 | 252 | 104 | 255 | 157 | 249 | 164 | 246 | 156 |

*One hundred fifty minutes a week for recess and one hundred minutes a week for physical education—the latter is a separate period and is an instructional period.

Table 1 leads one to conclude that in 1918-19 there was less planned apportionment of the time in the school day than now. It is difficult to discern any planning as to which subjects should be emphasized in the primary grades and which ones should be stressed in the intermediate grades. Favored subjects were given too much time in one grade, and left out or given little time in the next. In light of present concepts of instruction, arithmetic was given too much time in all the primary grades. Civics, geography, and history were taught as unrelated subjects or often omitted. School subjects were often studied in an undirected study period

due to combination grades. Physical education was omitted or given when the children were restless. Recesses were given once a day, usually.

It was found that time allotments today have been increased or decreased since 1918 for certain subjects and grade levels. In 1918 more time was allotted to instruction in arithmetic and reading in the primary grades than was given to instruction in these subjects in 1951 in the primary grades, although less noticeably in the area of reading. In 1951 it was found that more time was given to reading and arithmetic in grades five and six than had been used in 1918 in these grades. Reading in 1951 is emphasized in the primary grades and tapers off in the intermediate grades, while arithmetic is emphasized in the intermediate grades but receives little attention in the primary grades. Social studies were given very little time in 1918 and the intermediate grades were overloaded in this area.

When need and readiness are taken into account, there is some evidence that the time given to fundamentals was more skillfully apportioned in 1951 among the grades of the elementary school. While more time appears to have been given to the "fundamentals" in the primary grades in 1918, it would be necessary to take into consideration in today's program such correlated activities as special phonics periods, speech lessons, directed reading, remedial group instruction, and so on. It is fairly claimed that we do provide as much time today for the instruction of fundamentals on a better balanced basis as formerly was given.

In addition to this, the more skillful apportionment of the time in modern schools and the related study of geography, history, and civics in one 50-60 minute social studies period leaves time for the enrichment subjects. These do not detract from the "fundamentals", but make them more meaningful. The correlated activities and enrichment subjects provide purposeful study of reading, language, arithmetic, writing, and spelling throughout the school day in 1951.

The state Education Code requirement that a minimum of fifty per cent of the school time in grades one to six must be alloted to the fundamental subjects is being met or surpassed in 1951, both in the program guide and in actual classroom work. In 1918, however, the requirement that a minimum of two thirds of the school time must be allotted to the fundamental subjects was met in the teachers' guide, but in actual classroom work much of the time was spent on undirected study and meaningless memory work.

The length of the school year in 1951-52 was 178 days, or two days longer than in 1918-19. The length of the school day for grade one, and grades four to six inclusive was identical in 1951-52 and 1918-19. In the second and third grades the school day was fifteen minutes longer in 1918-19.

There are interruptions in today's program as there were in 1918.

Some of the more common interruptions today are released time for religious education, school traffic patrols, cafeteria work, orchestra, glee club, instrumental lessons, collections, drives, etc. By scheduling some of these activities so they fall in time scheduled for enrichment subjects and on varied days of the week, or by using different groups of pupils the schools can avoid undue amounts of time lost from the "fundamentals". However, the resultant interruptions to classroom activities and the absence of certain pupils from these activities cannot be overlooked. A very important contribution could be made through a study which would determine the relative values of these many and varied extra-curricular activities.

The evidence found in this study indicates that the "fundamentals" are being provided for in terms of time allotments and subject matter in a much more efficient manner in 1951-52 than they were 33 years ago. It would be desirable, where comparative data are available, to duplicate this study in other school systems for further verification of the conclusions.

## Emotionally Disturbed Children...

*(Continued from Page 218)*


9. Bach, George, "Father-Fantasies and Father-Typing in Father Separated Children," *Child Development* XVII, Mar.-June, 1946. p. 63.
10. Stolz, Lois M., "The Effect of Mobilization and War on Children." *Social Casework*, XXXII, No. 3, April, 1951. p. 143.
11. Sears, Robert and Pitner, Margaret, "Effect of Father Separation on Preschool Children's Doll Play," *Child Development*, XVII, Dec., 1946. p. 219.
12. Wallenstein, N. *Character and Personality of Children from Broken Homes.* Contributions to Education, No. 721. New York: Teachers College, Columbia University, 1937. 86 p.
13. Josselyn, Irene M. and Goldman, Ruth S., "Should Mothers Work?" *Social Service Review*, XXIII, Mar., 1949. p. 74.
14. Essig, M. and Morgan, D. W., "Adjustment of Adolescent Daughters of Employed Women to Family Life," *Journal of Educational Psychology*, XXXVII, 1946. p. 219.
15. Rivlin, Harry N., *Educating for Adjustment*, New York: D. Appleton-Century Co., 1936. 419 p.
16. Robinson, Helen, *Why Pupils Fail in Reading.* Chicago: University of Chicago Press, 1946. 257 p.
17. Gates, Arthur I., "The Role of Personality Maladjustment in Reading Disability," *Journal of Genetic Psychology*, LIX, Sept., 1941. p. 77.


A welcome addition to the literature dealing with moral and spiritual education is a pamphlet prepared by the National Congress of Parents and Teachers in cooperation with the Educational Policies Commission of the NEA. Having the apt title, "Moral and Spiritual Education in Home, School, and Community," the 28-page pamphlet was prepared to help local parent-teacher associations plan discussions and actions that will contribute to the moral and spiritual development of children and youth. Copies of the booklet may be ordered from the National Congress of Parents and Teachers, 600 Michigan Blvd., Chicago 5. Illinois.

# Financial Support of the County Superintendents' Services

H. Fred Heisner

THE county in the California school system is the intermediate unit. However over the years the county superintendent has been given many additional responsibilities. To meet these additional responsibilities the county superintendent has had three sources of revenue: (1) He has had the supervision fund; (2) Some of the personnel have been paid from the county general fund; and (3) Beginning with 1931 he had the unapportioned county elementary school fund and the unapportioned county high school fund. This study was completed in 1946.

The study was a critcal analysis of the history, development, uses, and possible future of the unapportioned funds. To summarize, the study tried to do the following:

1. Outline the history and backgrounds for the funds.
2. Outline the legal provisions for the funds.
3. Develop and secure answers to a questionnaire getting at the status of the funds in the fifty-eight counties. Questionnaires were obtained from all.
4. Analyze the judgments of the county superintendents regarding the funds.
5. Analyze the amounts budgeted for education services from the funds as reported in the questionnaires.
6. Analyze the amounts budgeted for business and operational services as reported in the questionnaires.
7. Analyze the personnel employed in county school departments as reported in the questionnaires.
8. Outline a recommended plan for financing county school services in California.

To do this a questionnaire was prepared to submit to the county superintendents to get the necessary data.

Before the questionnaire was constructed, a series of conferences were held with county superintendents and county officials in the following counties: Los Angeles County, Riverside County, San Bernardino County, Kern County, Tulare County, and Fresno County. From these conferences notes were made of points that might merit consideration. Questions were then listed after the items that seemed to need study. Forms were then devised to obtain from the county superintendents the facts and judgments needed.

---

*Dr. Heisner has a broad California public school experience. He has been classroom teacher, elementary principal, and district superintendent. Since 1947 he has been superintendent of the Centinela Valley Union High School District, Inglewood. The present article is a digest of findings obtained in his doctoral dissertation at the University of Southern California.*

## County Classification

There are fifty-eight counties in California. A questionnaire was mailed to each county superintendent in each county except the unified city and county of San Francisco. An attempt was made to secure 100 per cent replies to the questionnaire. This attempt was successful, for every county finally returned a questionnaire.

Because there were such great differences from county to county it was decided to classify the counties. The classifications were therefore on the basis of pupil population and the number of cities in the county.

Class I counties were the large metropolitan counties. There were two of these.

Class II were counties with less concentrated population. These counties had one or more cities of 10,000 population or more. A.D.A. ranged from 6,003.58 units to 55,699.98 units.

Class III counties had no cities of 10,000 population or over and had total A.D.A. units from 6,003.58 to 55,699.98.

Class IV counties were the small, desert, mountain or isolated counties with average daily attendance of from 29.76 units to 1,290.67 units.

## County Services

The responsibilities of county superintendents seemed to fall into two parts: (1) that for educational service, and (2) the personnel needed to carry on the educational activities of the office.

The amounts budgeted for educational service were reported on the questionnaire. The amounts budgeted were arranged in tables for each county in each class. The counties were numbered in descending order of size in each table so that the relationship between size and expenditure could be shown. The statistical procedure used is a formula from *Statistics in Psychology and Education* by Henry E. Garrett.

This is the method of rank differences. The purpose is to find the relationship between the size of the counties and the amount budgeted. The correlation between the order of size and the order of amount budgeted is computed by the formula, $\rho = 1 - \frac{6 \Sigma D^2}{N (N^2 - 1)}$. "$\rho$" is the rank correlation coefficient. Since "r," the symbol for the coefficient of correlation is more generally known, this symbol has been used. A table showing the equivalent "r" values for "$\rho$" values was used to convert the "$\rho$" values to "r."

The following facts were reported regarding services provided:

1. Emergency schools and emergency teachers represented a need in most

counties. One county budgeted almost one-third of its total budget to be given to needy districts by means of emergency apportionments.

2. Some counties used the balances in the unapportioned funds for emergency loans to districts pending arrival of state funds.
3. Printing and description of district boundaries budget amounts were varied.
4. The correlations for election expenses were not high. This item was used as a norm to determine how much correlation between the rank order of amount budgeted and the size of the county might be expected since all the countries of the state were required to meet this need. Low correlation here suggested that administration of all needed services might be improved.
5. The budget amounts for health and safety institutes for non-certificated employees were found to be quite disproportionate.
6. Budget amounts for transportation were examined. The "r" was not high.
7. Many counties did not budget an amount for capital outlays.

## County Office Staff

A consideration of the personnel involved two parts. First, the total personnel employed was considered.

Second, the personnel paid from unapportioned funds was considered. The number of persons employed and their duties indicate the part unapportioned funds played and their possibilities.

In Class I counties, county one employed a total personal of 164.5, and county two, 30.

In Class II counties, the median total number of persons employed was 14.63. "r" was .69. The formula by which this coefficient was obtained is explained above. Whenever a county did not report its personnel, that county was not ranked, and it was not one of the number used in computing the coefficient for that class.

In Class III counties the median total number of persons employed was six. "r" was .58.

In Class IV counties the median total number of persons employed was two. "r" was .95.

Personnel was paid from unapportioned funds as follows:

In Class I counties, county one paid for the time of 93 persons from unapportioned funds. County two paid for the time of 21.75 persons from unapportioned funds.

In Class II counties the median number of persons paid from unapportioned funds was eight. The coefficient was only .65.

In Class III counties, the median number of persons paid from unapportioned funds was three. The coefficient of correlation between the size of the county and the number employed under this fund was .78.

In Class IV counties, the median number of persons paid from unapportioned funds was .13. The correlation coefficient between the size of the county and the number employed under this fund was .78.

The total personnel employed was considered in a similar way in the study. The correlation between the size of the counties and the total number of persons employed was on the whole not high. The correlation coefficients were .69 for Class II, .58 for Class III, and .94 for Class IV.

The relationship between the size of the counties and the number of personnel employed was greater than between the amounts budgeted and the size of the counties. Nevertheless, it was not high. This may be further indication that services offered were determined by factors other than need.

## Recommended Practice

It has been impossible in this summary to give more than a sampling of the kinds of facts that were accumulated about the financing of needed county services. However, as a result of these that we have reported and others included in the study, an attempt was made to make certain recommendations that would improve the financing of these services.

1. The use of two funds to provide for services that could not be kept completely separate was ill-advised.

2. There should be a more effective way of establishing what the real need for services is in each county.

3. As allocated in the past, the superintendent kept out part of the money apportioned to his county for school services before he apportioned the money to the districts in his county. This resulted in embarrassment to the county superintendendt of schools for when he requested additional money for unapportioned funds the amount available for apportionments to the districts was less. Therefore, it was recommended that money from the state fund should be taken out by the state before any apportionments are made to the counties.

4. In the past, unapportioned funds have been allocated on the basis of the number of pupils in the county. City districts did not receive services from the county superintendent's office. Therefore, another recommendation was that funds be allocated on the basis of a formula for each service.

5. It was recommended that services of the county superintendent should be available to all districts if they wanted them and needed them.

6. It was also suggested that districts with well established administrative organizations could be loaned personnel for research, supervision, or other needed services.

7. It was suggested that an assistant state superintendent be appointed as a resource person for county superintendents. Such a person might provide leadership that would help to clarify the place of the county school department in the state's educational system.

8. Many of the counties had so few pupils it would be very uneconomical to provide the needed service in that county. Six counties had a total average daily attendance in elementary and high school of less than 1000 units. Joint programs need to be arranged for such counties. It is at this point that an assistant superintendent mentioned above could be of great assistance. More than half of the counties in Class III and all the counties in Class IV had a total average daily attendance in elementary and high school of less than 4000. These figures no doubt have changed but their enrollment is probably still too small to enable them to provide needed services. There are certainly needs that could be met through cooperation much more easily and economically than individually.

*(Continued on Page 232)*

# Girls' Social Groups Rate Each Other

## Ratings of High School Girls Who Belong to Y Clubs and of Those Who Do Not Belong by Each of These Two Groups

EVAN R. KEISLAR

IN THE HIGH school of today, many individuals are disturbed by the existence of prestige social groups or cliques. Such groups are often regarded as a divisive influence in the school because of the personal antagonisms they foster. To throw some light on this question we may ask how those who "belong" and those who do not "belong" perceive each other as individuals. Do the non-members, for example, regard the members as conceited, unfriendly, or inconsiderate, while the members think of themselves as the opposite?

In a high school with an enrollment of 1900 in a largely residential section of Los Angeles, such questions were raised in connection with a group of clubs sponsored by the YWCA in cooperation with the school administration. The study was conducted among the girls in this school who belonged to a B-11 class in which five such clubs were organized. The problem of this investigation was to determine in what ways the group of girls who are members of these clubs and the group of girls who are not members rate themselves and each other on certain traits related to social acceptability. Such ratings were obtained without reference to the group affiliation of the individuals being rated.

## The Clubs

These Y clubs are formed among the entering tenth grade pupils on a "friendship pattern"; any group of girls which wishes to do so may organize its own club. Once the club is formed, new members are admitted only upon invitation by members of the club. While a policy of deliberate social exclusion of individuals is discouraged by the administrators of the program, these efforts are not entirely successful. The fact that the members of these clubs are highly selected is indicated in Table I.

That these clubs possess high prestige in the school is shown in several ways. The social, recreational, and service activities of these clubs receive prominent support by the agencies of both the student body and the school administration. For example, the dances sponsored jointly by these clubs

*Dr. Evan R. Keislar is assistant professor of education at the University of California, Los Angeles. He had previously taught at Tufts College and Princeton University, and also served as research associate for the College Entrance Examination Board, and the National Defense Research Committee. Dr. Keislar was awarded his Ph.D. at the University of California, Berkeley, in 1944.*

rank along with the school proms in terms of importance and publicity. These clubs constitute an effective substitute for sororities which they replaced a few years earlier; there is no evidence of secret sororities in this school. In individual interviews conducted among most of the girls in this B-11 class, these organizations were mentioned more often than all others combined as the ones members were glad they belonged to and the ones which non-members wanted to join. Some antagonism toward these clubs on the part of non-members is to be noted since these clubs were also mentioned more often than all other groups combined as the ones to which non-members were glad they did not belong.

## The Subjects

Out of 209 girls who were members of this B-11 class, the 170 girls who had been enrolled a full school year were selected for the population for this study. Of this group, 84 belonged to the five Y clubs previously described and 86 did not belong. It may be noted in Table I that the girls who were Y members differed significantly from non-members with respect to occupation of father, test intelligence, and school marks.

**TABLE 1**

**FATHER'S OCCUPATIONAL LEVEL, INTELLIGENCE, AND SCHOOL MARKS OF Y MEMBERS AND NON-MEMBERS.**

**Based on 84 girls who belong to Y clubs and 86 girls who do not.**

| *Variable* | *Group* | *N* | *M* | $\sigma$ | *D* | $\sigma_D$ | $D/\sigma_D$ | *Level of Sig.* |
|---|---|---|---|---|---|---|---|---|
| Father's occupation* | Y members | 82 | 2.8 | 1.7 | | | | |
| | Non-members | 79 | 4.2 | 1.3 | 1.4 | .2 | 5.8 | .001 |
| Otis I. Q. | Y members | 84 | 107.8 | 12.4 | 8.1 | 1.9 | 4.3 | .001 |
| | Non-members | 86 | 99.7 | 12.2 | | | | |
| School marks** | Y members | 84 | 5.3 | 2.1 | 1.3 | .3 | 4.1 | .001 |
| | Non-members | 86 | 4.1 | 2.0 | | | | |

Note: All figures have been rounded off to one decimal place after computation.

*Scaled according to method given by W. Lloyd Warner, Marchia Meeker, and Kenneth Eells, *Social Class in America,* (Chicago, Science Research Associates, 1949), pp. 140-1, where 1= professional and managerial occupations, 7 = unskilled.

**Average school mark made during the tenth grade. Scaled by setting A = 9, B = 6, C = 3, D and F = 0.

## The Ratings

To obtain information on how the members and non-members of these groups preceive themselves and each other, ratings on twelve bi-polar traits were obtained during a school period according to the *guess-who* technique.

For each variable two opposing *guess-who* statements adapted from Tryon's device (2) were used, the entire instrument thus consisting of 24 statements. Each girl in the class was given a list of the names of all the B-11 girls and asked to indicate those girls whose behavior was described by each of the statements on the rating blank. No reference was made to organizational affiliation. Raters were asked not to sign the rating blank, but by means of invisible fluorescent ink coding the identity of each rater was established. Ratings were scored according to the original CEI formula, Trait rating = (No. of positive mentions) — (No. of negative mentions), where one statement was arbitrarily assigned positive values and the other negative. The twelve variables are roughly described by phrases given in Table 2 where the first phrase applies to the positive statement and the second to the negative. Seven of these traits, indicated by astrisks, were judged to be related to social acceptability on the basis of the study of Kuhlen and Lee (1).

Since four Y members and four non-members were absent on both occasions when the instrument was administered, ratings were obtained from 80 members and 82 non-members. Separate tallies were made of the ratings of each of these two groups with all self-mentions being ignored. Consequently for each of the 84 members and 86 non-members two scores for each of the twelve variables were obtained, one score representing the rating by the Y members and the other score that by the non-members.

## Results

There was a statistically significant and strong tendency for a girl to be rated more often by the group to which she was assigned in this study than by the other group. Furthermore, the distributions of scores for the two sets of ratings obtained from the members and non-members were all leptokurtic.[1] Consequently the following ratio was used to obtain an estimate of the average trait rating for each group:

Average Rating = (No. of girls in the group with positive scores) ÷ (Number of girls in the group with positive and negative scores).

This method thus ignored those with scores of zero. It was assumed that such individuals were either not known by the rating group or were judged by the raters not to deviate towards either statement. For each of the rating groups therefore, there were available two such proportions for each trait, one representing the judgment of this group about the Y members and the other about the non-members. A comparison of these two proportions for each trait, as given in Table 2, indicates whether a group rated itself differently on the trait from the way it rated the other group.

[1] A distribution which is more peaked than the "normal' curve is said to be letpokurtic.

It will be noted that on all but one of these twelve traits both groups gave a greater proportion of positive scores to the Y members although many of the differences are not significant. The one exception shows no difference in conceit between the two groups as rated by the Y Members, and a slightly higher, but unreliable, rating on conceit for the non-members as rated by themselves. Both groups rated the Y members significantly higher on friendliness, being welcomed by the same sex, and being influential. In addition the Y members were rated by the non-members as being significantly more considerate. On the other hand the Y members rated themselves as being more cheerful than the non-members, but while the non-members also rated the Y members higher on this trait, the difference is significant at only the .05 level. The differences regarding schoolwork and studies are to be expected since the Y members made better marks.

## TABLE 2

### RATINGS OF Y MEMBER GIRLS AND NON-MEMBER GIRLS BY EACH OF THESE GROUPS

**Based on ratings given by 80 Y members and 82 non-members.**

| *Trait* | *Ratings Given* TO | BY | *Mentions* No. of TOTAL | POSIT. | *Proportion* | *Dif.* | $\sigma_D$ | $D/\sigma_D$ | *Level of Signif.* |
|---|---|---|---|---|---|---|---|---|---|
| | Y | Y | 45 | 71 | .63 | .14 | .09 | 1.66 | ---- |
| Talkative— | | Non-Y | 32 | 65 | .49 | | | | |
| silent | Non-Y | Y | 39 | 67 | .58 | 02 | .08 | 0.24 | ---- |
| | | Non-Y | 44 | 73 | .56 | | | | |
| | Y | Y | 37 | 60 | .62 | .08 | .10 | 0.83 | ---- |
| Old acting— | | Non-Y | 23 | 42 | .53 | | | | |
| young acting | Non-Y | Y | 32 | 52 | .62 | .09 | .09 | 1.00 | ---- |
| | | Non-Y | 34 | 65 | .52 | | | | |
| | Y | Y | 45 | 65 | .69 | .27 | .09 | 3.01 | .01 |
| *Friendly— | | Non-Y | 24 | 57 | .42 | | | | |
| unfriendly | Non-Y | Y | 49 | 58 | .84 | .25 | .08 | 3.07 | .01 |
| | | Non-Y | 40 | 67 | .60 | | | | |
| | Y | Y | 41 | 63 | .65 | .38 | .09 | 4.22 | .001 |
| Likes schoolwork— | | Non-Y | 16 | 59 | .27 | | | | |
| dislikes schoolwork | Non-Y | Y | 49 | 60 | .82 | .44 | .09 | 4.93 | .001 |
| | | Non-Y | 22 | 59 | .37 | | | | |
| | Y | Y | 42 | 66 | .64 | .06 | .10 | 0.57 | ---- |
| *Considerate— | | Non-Y | 25 | 43 | .58 | | | | |
| inconsiderate | Non-Y | Y | 46 | 64 | .72 | .26 | .09 | 2.97 | .01 |
| | | Non-Y | 29 | 63 | .46 | | | | |
| | Y | Y | 31 | 70 | .44 | .10 | .09 | 1.06 | ---- |
| *Popular[1]— | | Non-Y | 18 | 52 | .35 | | | | |
| unpopular[1] | Non-Y | Y | 33 | 61 | .54 | .13 | .09 | 1.52 | ---- |
| | | Non-Y | 29 | 71 | .41 | | | | |

## TABLE 2—(Continued)

### RATINGS OF Y MEMBER GIRLS AND NON-MEMBER GIRLS BY EACH OF THESE GROUPS

**Based on ratings given by 80 Y members and 82 non-members.**

| *Trait* | *Ratings Given* TO | BY | *No. of Mentions* TOTAL | POSIT. | *Proportion* | *Dif.* | $\sigma_D$ | $D/\sigma_D$ | *Level of Signif.* |
|---|---|---|---|---|---|---|---|---|---|
| | Y | Y | 42 | 67 | .63 | .24 | .10 | 2.39 | .05 |
| Persistent— | | Non-Y | 16 | 41 | .39 | | | | |
| not persistent | Non-Y | Y | 41 | 54 | .76 | .23 | .09 | 2.57 | .05 |
| | | Non-Y | 33 | 62 | .53 | | | | |
| | Y | Y | 42 | 67 | .63 | .26 | .10 | 2.71 | .01 |
| *Welcomed[2]— | | Non-Y | 16 | 44 | .37 | | | | |
| ignored[2] | Non-Y | Y | 47 | 60 | .78 | .27 | .09 | 3.12 | .01 |
| | | Non-Y | 34 | 66 | .52 | | | | |
| | Y | Y | 33 | 60 | .55 | .18 | .11 | 1.64 | ---- |
| Puts studies first— | | Non-Y | 13 | 35 | .37 | | | | |
| puts studies last | Non-Y | Y | 39 | 50 | .78 | .42 | .09 | 4.47 | .001 |
| | | Non-Y | 23 | 64 | .36 | | | | |
| | Y | Y | 27 | 65 | .42 | .00 | .10 | .00 | ---- |
| *Conceited— | | Non-Y | 15 | 36 | .42 | | | | |
| not conceited | Non-Y | Y | 21 | 57 | .37 | | | | |
| | | Non-Y | 27 | 63 | .43 | .06 | .09 | .67 | ---- |
| | Y | Y | 45 | 60 | .75 | .36 | .09 | 3.96 | .001 |
| *Cheerful—sad | | Non-Y | 22 | 57 | .39 | | | | |
| | Non-Y | Y | 39 | 51 | .76 | .21 | .09 | 2.29 | .05 |
| | | Non-Y | 32 | 58 | .55 | | | | |
| | Y | Y | 31 | 61 | .51 | .34 | .10 | 3.44 | .001 |
| *Influential— | | Non-Y | 7 | 41 | .17 | | | | |
| not influential | Non-Y | Y | 38 | 55 | .69 | .38 | .10 | 3.92 | .001 |
| | | Non-Y | 17 | 54 | .31 | | | | |

NOTE—All figures have been rounded off to two decimal places after computation.
*Traits judged to be related to social acceptability.
[1] With the opposite sex.
[2] By the same sex.

A comparison of the ratings giving *by* the two group *to* the same group shows that in general each group received a higher proportion of positive scores from the non-members than they did from the Y members. But the differences between the proportions on any one trait are not significant at the .01 level. In only four cases are the differences significant at the .05 level: the ratings of the Y members on the traits of friendliness, liking of schoolwork, putting studies first, and leadership. While such data may suggest that the Y members and non-members possessed different standards or frames of reference, in general this method of comparison shows a fair amount of agreement between the two groups of raters.

## Conclusions and Implications

No evidence was found to suggest that the girls who do not belong to prestige clubs in this school hold antagonism toward or view in a socially unfavorable light the girls who do belong. In fact every indication is to the opposite, since on all of the traits related to social acceptability the non-member group rated the members higher than they rated themselves, in most cases the differences being significant. It should be noted that these results do not necessarily mean that the non-members like the Y girls more or prefer their company. A girl might be judged friendly, for example, even though the rater did not receive friendly overtures from her. But such objectivity is probably rare. Using many of these same traits with twelfth grade girls, Kuhlen and Lee (1) found such ratings clearly related to social acceptability as determined by the more personal method of sociometric choices.

The question as to how much of the superiority of the members on these trait ratings is to be attributed to selection, to halo effect, or to the status and experience which club membership brought, is beyond the scope of this study. Furthermore, the findings do not necessarily apply to prestige groups or Y programs in other schools where different social structures may exist. Lastly, since there is evidence of antagonism toward these clubs on the part of non-members, a study of atttiudes toward the groups as such may have yielded findings different from the results of this study based as they were on ratings of individuals.

### REFERENCES

1. Kuhlen, R. G., and Lee, B. G., "Personality Characteristics and Social Acceptability in Adolescence," *Journal of Educational Psychology*, 1943, 34:321-40.
2. Tryon, Caroline McCan, *Evaluation of Adolescent Personality by Adolescents*, Monograph of the Society for Research in Child Development, No. 23. 1939, Vol. 4, No. 4.

## Support of County Services...

*(Continued from Page 226)*

The study was concluded with suggested formulas to determine the amount needed for each of the services provided by the county school superintendent's office. Many of the suggestions contained above as a result of this study have been enacted into the law since 1946, and some of the subsequent county studies have dealt with the suggested problems. The county unit in California today is as important, if not more important, than it has ever been in the history of our school system. Perhaps the reporting of these county studies may serve to renew interest in a very important part of our educational system.

# Book Reviews

## The Education of Exceptional Children

**It's Challenge to Teachers, Parents, and Laymen, Second Edition. Arch O. Heck. New York: McGraw-Hill Book Company, 1953. Pp. 513 +xiv.**

This is a revision of a book originally published in 1940. It will be of most interest to professional educators; but it can—and probably will—be read with profit by parents and others interested in the welfare of children. The book attempts to cover all of the various ways in which children may be exceptional. Part One deals with socially handicapped children, Part Two with physically handicapped children, and Part Three with those that are mentally exceptional. In the last case, the children may not be handicapped but may instead be exceptionally favored mentally. In the last part of the book, various aspects of the administrative organization and the financing of programs of making provision for exceptional children are considered.

The chief value of the book lies in its extensive coverage of actual programs in operation in various parts of the country. Each type of handicap is treated in a separate chapter which contains descriptions of provisions now being made in certain states or localities. Much of this material is based upon communications made directly to the author by the agencies concerned and hence includes information not available to the average reader from other sources. The book also contains comprehensive bibliographies at the end of most chapters. Some of the references concerning gifted children are rather out-of-date, however.

The book will be particularly valuable to the person who desires a general summary of the problems of educating exceptional children. The recommendations are not new; but will probably be new to parents and other laymen who may be referred to this book. The professional educator is apt to be most impressed with the lack of recognized research findings that the book reveals. This is particularly noticeable in the chapters on gifted children.

## Improving Reading in All Curriculum Areas

**William S. Gray, Editor. Chicago: The University of Chicago Press, 1952. Pp. 262 +viii.**

This book is a summary of the material developed at the Annual Conference on Reading held at the University of Chicago in 1952. It contains articles by fifty-two different authors. After devoting several chapters to the general problems of reading and reading improvement, it considers the improvement of reading in relation to certain curricular fields, including

science, mathematics, and social studies. Primary, elementary, and secondary situations are discussed separately. Chapter Eighteen contains lists of recent books published for elementary and secondary readers, respectively.

The book generally emphasizes the need for cooperation among teachers in developing reading competence in all curricular fields. The need for individualization of the reading program is also stressed and examples of specific methods are given. In conclusion, it is asserted that the future will see instead of a major emphasis on the improvement of general ability to read, "increasing attention . . . to the improvement of those aspects of reading of special importance in the respective curriculum areas."

## The Controversial Problem of Discipline

**Katharine M. Wolf. New York: The Child Study Association of America, 1953. 35 pages in paper.**

A child study publication of the Child Study Center, Yale University, this little pamphlet is a serious proposal to find a middle ground between the two extremes of child self-expression and child suppression. It is couched in straight-forward, non-technical language which should appeal to both teacher and parent.

To parent-teacher groups and individual parents the booklet offers a very good background of discussion and planning for meeting discipline problems in the school and home. It does not offer pat solutions to specific situations; rather, it affords a very broad foundation for approaching any situation for analysis.

## The Study of English in California Schools

**George F. Sensabaugh, George Hinkle, James R. Caldwell, Alfred H. Grommon. Stanford: Stanford University Press. 1953. Pp. 48 +vi.**

Some of the findings of the Committee to Study English Curricula in the California Educational System are presented in this small book. The Committee was appointed just before Pearl Harbor by the late Aubrey Douglas at the request of the College English Association of the Bay Area and the California State Association of Teachers of English. The findings reported concern both the elementary and secondary levels. None of the studies is very comprehensive, but they all tend to present the same picture. Students in general, the authors report, are unable to read and write effectively due to a lack of ability to handle the mechanics of English usage. Additional material is presented to show that the study of "classics" in high school is effective (at least with students who later enter college). The training of secondary English teachers is also reviewed.

Although the book represents a definite point of view and presents data designed to confirm it, the authors have done a competent piece of work. Further data might alter some of their conclusions; but the authors advocate further study. Whether valid or not, their criticism of present practices in the teaching of English in California schools deserves attention.

# *Research* News and Views

Of the 93,263 certificated persons employed in the public schools of California on October 31, 1952, 5,407 were reported serving on emergency credentials, and 3,605 elementary teachers on provisional credentials. A report of the collegiate training of 8,218 of these 9,012 teachers reported by county superintendents of schools, shows 3,038 have bachelor's degrees or more; 2,568, 90 to 119 hours of college training; 1,901, 60 to 89 semester hours; 406, 30 to 59 semester hours; 173, 1 to 29 semester hours; and 132, 0 semester hours. Over three-fourths of the counties in the state require emergency teachers to have at least two years of college preparation.

Of the June, 1952, graduates in teacher education, one out of four of the elementary teachers and more than one half of the secondary teachers did not take teaching positions in the fall of 1952, for the following reasons: geographic location; accepted positions outside teaching profession; continued professional training; were not well recommended; over supply of teachers in fields in which trained; marriage; and military service.

California State Department of Education. *Report for Governor's Council,* March 30, 1953.

* * * * *

The U.S. Public Health Service reported that for the first quarter of 1953 the record of live births in the nation was such as to cause the prediction that 1953 would set a new record. During the three month period live births ran three per cent ahead of the same period in 1952. Both 1951 and 1952 set new records in their turn. The end is not yet in sight for expanding school enrollments.

* * * * *

The California Association of School Administrators recently announced the appointment of Dr. Hubert Armstrong to direct its study of administrative policies and practices. Dr. Armstrong, a former California educator, has been on the staff of the school of education at Harvard University for the past few years. He will coordinate the various research projects to be sponsored by the Association during the current school year.

New twin studies are being conducted at the University of Michigan and Ohio State University. Dr. L. R. Rice at Michigan is investigating the heredity of special abilities in human beings. He intends to measure identical and nonidentical twins to discover the effects of heredity influences on a variety of traits. Dr. D. C. Rife at Ohio will give identical twins differentiated training over a period of time and compare them at the end of the period. He hopes to discover new facts on the hereditary basis of capacities to master skills, and to invent new controls for testing the relative efficiency of varying types of training.
*Eugenical News Quarterly*, June, 1953.

* * * * *

The U. S. Office of Education has recently issued a monograph, "Basic Body Measurements of School Age Children," which is intended to serve as a handbook for school officials, architects, and design engineers. Data provided in the monograph should prove invaluable to those who have the responsibility of planning school buildings, furniture, and equipment. Measurements are provided for boys and girls for each age from 4 to 17 years.

* * * * *

Mrs. Edith Maris, well-known to California research people, has been appointed a senior staff associate of Science Research Associates, publishers of tests and guidance materials. A member of the sales staff of SRA for the past 11 years, Mrs. Maris assisted the Los Angeles city schools last March in their pioneering survey of teacher morale in which 14,000 Los Angeles educators participated. She also helped conduct the educators opinion inventory among 4,000 Hawaiian educators last February. Mrs. Maris will spend much of her time in the western states helping conduct opnion surveys in various school districts.

* * * * *

### On the TV Channels

The 1953 California Legislature rejected a proposal to authorize state and local agencies to buy equipment for educational television stations.

In 1953 Oklahoma is the first state to establish an Educational Television Authority. It is authorized to establish a statewide TV network, including power to issue bonds for financing.

A Los Angeles school has established an elaborate student hobby club plan to compete with and combat pupil following of television. All the fifth and sixth grades chose to enroll in the club program, some 300 children.

Federal Communications Commision has announced reservation of educational TV Channels for indefinite period into future.

# INDEX

**VOLUME IV • 1953**

**Key to Paging**

1 — 48 January
49 — 96 March
97 — 144 May
145 — 192 September
193 — 240 November


Administration
———— *A Critical Study of the Organization and Functions of County Departments of Education in California*, D. T. Williams, 117-122

Audio-Visual Education
————*Audio-Visual Materials and Learning Efficiency*, L. W. Johnson, 87-91
————*A Study of Children's TV Interests*, L. F. Scott, 162-164

*Bibilography, Classified, of Graduate Theses and Dissertations in Education of California Colleges and Universities in 1952*, 125-144

BROCK, HARRIS HAIDEN, *An Analysis of General Elementary Credential Requirements in California State Colleges*, 44-45

BROWNELL, JOHN ARNOLD, *The Influence of Training in Reading in the Social Studies on the Ability to Think Critically*, 28-31

CAFFREY, JOHN, *"Auding" as a Research Problem*, 155-161

CALIFORNIA STATE ADVISORY COUNCIL ON EDUCATIONAL RESEARCH, *Basic Principles to Guide the Public School Research Worker*, 115-116

CALIFORNIA EDUCATIONAL RESEARCH ASSOCIATION, *Digests of Papers Presented at the 1953 Annual Conference*, 182-190

CARTER, HAROLD D., *Cross-Validation of a Study Methods Test*, 32-36

Certification of Teachers — *An Analysis of General Elementary Credential Requirements in California State Colleges*, H. H. Brock, 44-45

CLANCY, NORAH M. and SMITTER, FAITH, *A Study of Emotionally Disturbed Children in Santa Barbara County Schools*, 209-218+

County Departments of Education
———— *A Critical Study of the Organization and Functions of County Departments of Education in California*, D. T. Williams, 117-122
———— *Financial Support of the County Superintendents' Services*, H. F. Heisner, 223-226+

Curriculum — *What Should Be Taught in High School?* R. P. Durbin, 66-68

DAHL, JOHN ANTON, *What Good Are Follow-Up Studies?* 177-181

*Digests of papers presented at the 1953 C.E.R.A. Conference*, 182-190

DURBIN, ROBERT P., *What Should Be Taught in High School?* 66-68

Editorials: *Research Must Recognize Educational Objectives*, 2; *The Doctor Prescribes*, 50; *Are Your Principles Showing*, 98; *Janus in September*, 146; *Blow, Gabriel, Blow!* 194

Education Aims — *Changing Objectives and Their Implications for Research*, J. P. *Leonard*, 3-9

Education Evaluation — *Do Modern Schools Provide Sufficient Time for the Teaching of the "Fundamentals"?* J. P. Wilson, 219-222

Exceptional Children — *Emotionally Disturbed Children in Santa Barbara County Schools*, N. M. Clancy and F. Smitter, 209-218+

FEIVESON, PHILIP, *The Value of a Personality Inventory in a Self-Appraisal Course on the Secondary School Level*, 69-72

FINK, MARTIN, *Ethnocentrism as It Relates to Teaching Success*, 111-114

FREEMAN, FRANK N., *Research in Perspective*, 195-200

GREGORY, W. EDGAR, *Personality Assessment in the College Program*, 10-13

GALLOWAY, DAVID W. and TOWNER, LEONARD W., Jr., *Recognition of Examination Questions and Its Relationship to Improvement in Score During Repeated Testing*, 56-61+

Guidance and Counseling
——— *What Good Are Follow-Up Studies?* J. A. Dahl, 177-181
——— *The Value of a Personality Inventory in a Self-Appraisal Course on the Secondary School Level*, P. Feiveson, 69-72

HEISNER, H. FRED, *Financial Support of the County Superintendents' Services*, 223-226+

HILGARD, ERNEST R., *Educationaal Research: Some Friendly Suggestions*, 51-55

HOLMES, JACK A., *Gifted Adults Can Learn to Read Faster*, 103-110

HOLY, THOMAS C., *Needed Reseaarch in the School Plant Field*, 203-208

HUNNICUTT, C. W., *Team Research in Education*, 99-102+

JOHNSON, LOAZ W., *Audio-Visual Materials and Learning Efficiency*, 87-91

KEISLAR, EVAN R., *Girls Social Groups Rate Each Other*, 227-232

Language Arts — *"Auding" as a Research Problem*, John Caffrey, 155-161

LEONARD, J. PAUL, *Changing Objectives and Their Implications for Research*, 3-9

Literary Appreciation — *The Relationship Between Reading Ability and Literary Appreciation*, D. G. Schubert, 201-202

MONROE, WALTER S., *Controlled Experimentation in the Development of Teaching-Learning Theory*, 147-154

NOWELL, ANN, *Peer Status as Related to Measures of Personality*, 37-41

PARR, FRANK W., *Fourth Annual State Conference on Educational Research*, 41-43
Reading
——— *Gifted Adults Can Learn to Read Faster*, J. A. Holmes, 103-110
——— *The Influence of Training in Reading in the Social Studies on the Ability to Think Critically*, J. A. Brownell, 28-31
——— *The Relationship Between Reading Ability and Literary Appreciation*, D. G. Schubert, 201-202

Research Conferences
——— *Digests of Papers Presented at the 1953 C.E.R.A. Conference*, 182-190
——— *Fourth Annual State Conference on Educational Research*, F. W. Parr, 41-43

Research Methodology
——— *Basic Principles to Guide the Public School Research Worker*, California State Advisory Council on Educational Research, 115-116
——— *Changing Objectives and Their Implications for Research*, J. P. Leonard, 3-9
——— *Educational Research: Some Friendly Suggestions*, E. R. Hilgard, 51-55
——— *Research in Perspective*, F. N. Freeman, 195-200

——— *Teacher Personnel Research: I, Considerations Relative to Research Design,* D. G. Ryans, 19-27
——— *Team Research in Education,* C. W. Hunnicutt, 99-102
——— *What Good Are Follow-Up Studies?* J. A. Dahl, 177-181

RYANS, DAVID G., *Teacher Personnel Research: I, Considerations Relative to Research Design,* 19-27; *II, Investigation of Teacher Characteristics,* 73-83

School Finance — *Financial Support of the County Superintendents' Services,* H. F. Heisner, 223-226+

School Plant — *Needed Research in the School Plant Field,* T. C. Holy, 203-208

SCHUBERT, DELWYN G., *The Relationship Between Reading Ability and Literary Appreciation,* 201-202

SCOTT, LLOYD F., *A Study of Children's TV Interests,* 162-164

SMITTER, FAITH and CLANCY, NORAH M., *A Study of Emotionally Disturbed Children in Santa Barbara County Schools,* 209-218+

Sociology, Educational — *Educational Sociology as a Factor in Developing Teaching Competence,* R. P. Whitfield, 62-65

Sociometry
——— *Girls Social Groups Rate Each Other,* E. R. Keislar, 227-232
——— *Peer Status as Related to Measures of Personality,* A. Nowell, 37-41

Spelling
——— *Comparison of Words Used in Spelling Texts with Those Used by Children,* P. K. Wilson, 84-86
——— *The Effectiveness of Formal Spelling Instruction in High School,* C. B. Willard, 14-18

STEPHENSON, HAROLD H., *Practices and Theories of Internship in Preparation of Secondary Teachers,* 165-172+

Teacher Education
——— *An Analysis of General Elementary Credential Requirements in California State Colleges,* H. H. Brock, 44-45
——— *Practices and Theories of Intership in Preparation of Secondary Teachers,* H. H. Stephenson, 165-172+

Teacher Personnel
——— *Educational Sociology as a Factor in Developing Teaching Competence,* R. P. Whitfield, 62-65
———*Ethnocentrism as It Relates to Teaching Success,* M. Fink, 111-114
——— *Teacher Personnel Research: II, Investigation of Teacher Characteristics,* D. G. Ryans, 73-83

Teaching-Learning
——— *"Auding" as a Research Problem,* J. Caffrey, 155-161
——— *Controlled Experimentation in the Development of Teaching-Learning Theory,* W. S. Monroe, 147-154
——— *Cross-Validation of a Study Methods Test,* H. D. Carter, 32-36
——— *The Effectiveness of Formal Spelling Instruction in High School,* C. B. Willard, 14-18

Television — *A Study of Children's TV Interest,* L. F. Scott, 162-164

Tests — Educational and Psychological
——— *Controlled Experimentation in the Development of Teaching-Learning Theory,* W. S. Monroe, 147-154

———*Constancy of Rorschach Movement Responses Under Educational Conditioning*, J. E. Blechner, 173-176
———*Cross-Validation of a Study Methods Test*, H. D. Carter, 32-36
———*The Influence of Training in Reading in the Social Studies on the Ability to Think Critically*, J. A. Brownell, 28-31
———*Peer Status as Related to Measures of Personality*, A. Nowell, 37-41
———*Personality Assessment in the College Program*, W. E. Gregory, 10-13
———*Recognition of Examination Questions and Its Relationship to Improvement in Score During Repeated Testing*, L. W. Towner, Jr. and D. W. Galloway, 56-61+
———*The Value of a Personality Inventory in a Self-Appraisal Course on the Secondary School Level*, P. Feiveson, 69-72

Theses and Dissertations — *Classified Bibliography of Graduate Theses and Dissertations in Education of California Colleges and Universities in 1952*, 125-144

TOWNER, LEONARD W., Jr. and GALLOWAY, DAVID W., *Recognition of Examination Questions and Its Relationship to Improvement in Score During Repeated Testing*, 56-61+

WHITFIELD, R. P., *Educational Sociology as a Factor in Developing Teaching Competence*, 62-65

WILLARD, CHARLES B., *The Effectiveness of Formal Spelling Instruction in High School*, 14-18

WILLIAMS, DAN T., *A Critical Study of the Organization and Functions of County Departments of Education in California*, 117-122

WILSON, JAMES P., *Do Modern Schools Provide Sufficient Time for the Teaching of "Fundamentals"?* 219-222

WILSON, PATRICIA KNOX, *Comparison of Words Used in Spelling Texts with Those Used by Children*, 84-86

## BOOK REVIEWS

American Council on Education Committee on Religion and Education, *The Function of the Public Schools in Dealing with Religion*, 191

Buros, Oscar Krisen (editor), *The Fourth Mental Measurements Yearbook*, 190

Cloud, Roy W., *Education in California*, 93

Graay, William S., *Improving Reading in All Curriculum Areas*, 233

Heck, Arch A., *The Education of Exceptional Children*, 233

Jordan, A. M., *Measurement in Education*, 94

Kinney, Lucien and Dresden, Katherine, *Better Learning through Current Materials*, 94

Landis, Paul H., *Adolescence and Youth*, 192

Macomber, Freeman Glen, *Teaching in the Modern Secondary School*, 94

Sensabaugh, George F.; Hinkle, George; Caldwell, James R.; Grommon, Alfred H., *The Study of English in California Schools*, 234

Wahlquist, John T.; Arnold, William E.; Roald, F. Campbell; Reller, Theodore L.; and Sands, Lester B., *The Administration of Public Education*, 93

Wolf, Katherine M., *The Controversial Problem of Discipline*, 234